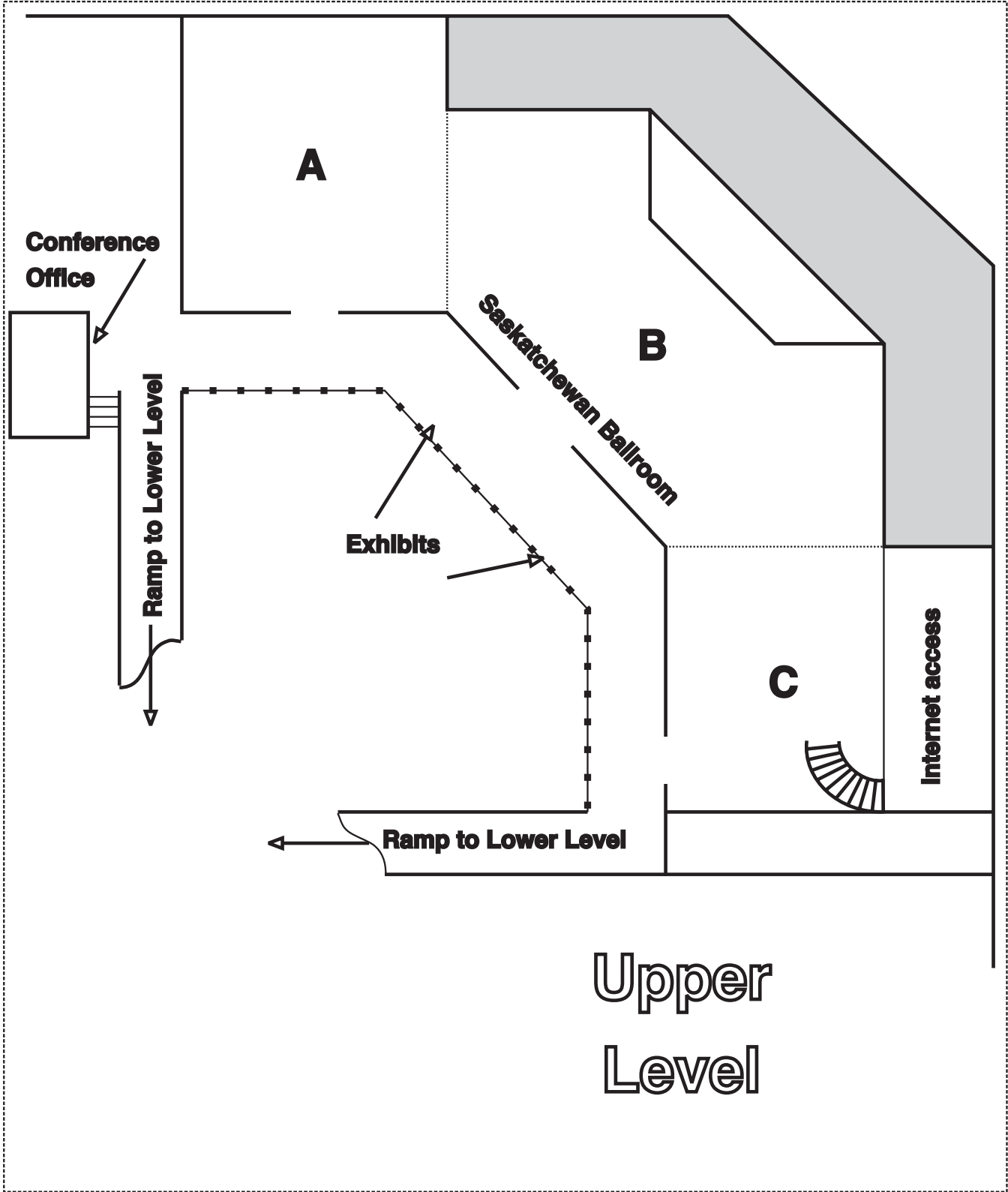


TABLE of CONTENTS

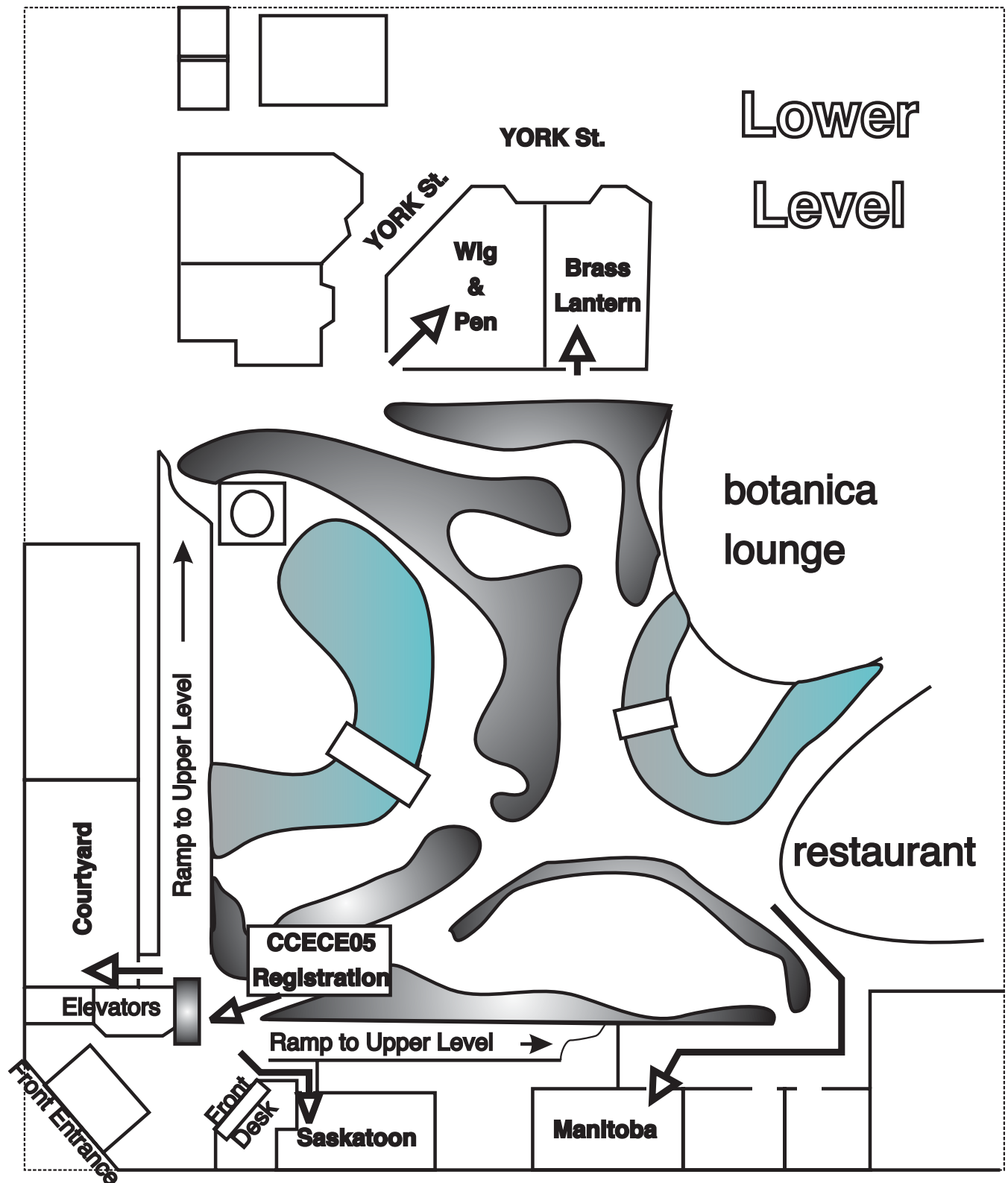
MAPS AND DIRECTIONS.....	2
UPPER FLOOR	2
LOWER FLOOR	3
TECHNICAL PROGRAM AT A GLANCE.....	6
MONDAY SESSIONS	6
TUESDAY SESSIONS.....	7
WEDNESDAY SESSIONS	8
GENERAL INFORMATION	9
REGISTRATION DESK.....	9
MEALS AND INCLUSIONS	9
DIETARY NEEDS:	10
INTERNET ACCESS.....	10
AUTHORS SCREENING ROOM	10
MESSAGES AND HELP	10
EXHIBITS	11
PARTNERS PROGRAM	11
LOCAL ATTRACTIONS & EVENTS.....	11
RESTAURANTS	12
AIRLINES AND TRANSPORTATION	12
WELCOME BY CONFERENCE CHAIR.....	14
WELCOME BY IEEE CANADA PRESIDENT.....	16
CCECE05 ORGANIZING COMMITTEE	18
CCECE05 TECHNICAL PROGRAM COMMITTEE.....	19
SPONSORS	20
WORKSHOPS	22
CANADIAN LIGHT SOURCE (CLS) SYNCHROTRON.....	26
CONFERENCE MEALS AND EVENTS.....	28
WELCOME RECEPTION	28
PLENARY SESSION.....	28
BREAKFASTS & REFRESHMENT BREAKS	29
LUNCHES	29
IEEE CANADA AWARDS RECEPTION & BANQUET	30
TECHNICAL PROGRAM DETAILS	31
AUTHOR INDEX.....	127
PAPER INDEX	149
CCECE 06 CALL FOR PAPERS	154

Maps and Directions

Upper Floor



Lower Floor



Saskatoon Area

Saskatoon Shines!

MINI MAP 2005

TOURISM SASKATOON

6 - 305 Idylwyld Drive North
Seasonal Office: Avenue C & 47th St. W.
(May 20 - September 5)
(306) 242-1206
www.tourismsaskatoon.com
Tourism Radio 91.7 FM Saskatoon

LEGEND

SASKATOON ATTRACTIONS	●
HOTELS/MOTELS/MOTOR INNS	●
BED & BREAKFASTS	●
OTHER ACCOMMODATION	●
CAMPGROUNDS	●
SHOPPING MALLS	■
VISITOR INFORMATION	?
BUS DEPOT	(B)
HOSPITALS	(H)
MEEWASIN TRAIL	—



Notes:

[illegible]

Technical Program at a Glance

Monday Sessions

Legend:

MM: Monday Morning

MA: Monday Afternoon

PS: Poster Session

TM: Tuesday Morning

TA: Tuesday Afternoon

PS: Poster Session

WM: Wednesday Morning

WA: Wednesday Afternoon

PS: Poster Session

Session		Topic	Room	Time
MM	1	Optical & Satellite Communications	Courtyard	10:00 – 11:40 AM
	2	Computer Networks & Systems 1	Saskatoon	10:00 – 11:40 AM
	3	Power Systems 1	Manitoba	10:00 – 11:40 AM
	4	Electronic Circuits & VLSI 1	Wig & Pen	10:00 – 11:40 AM
	5	Software Engineering	Brass Lantern	10:00 – 11:40 AM
MA	11	Propagation & Fading Channels	Courtyard	1:40 – 3:00 PM
	12	Digital Signal Processing 1	Saskatoon	1:20 – 3:00 PM
	13	Electric Machines & Drives 1	Manitoba	1:20 – 3:00 PM
	14	Digital Electronics	Wig & Pen	1:20 – 3:00 PM
	15	Evolutionary Computing	Brass Lantern	1:20 – 3:00 PM
MA	21	Communications & Networking 1	Courtyard	3:30 – 5:10 PM
	22	Digital Signal Processing 2	Saskatoon	3:30 – 5:10 PM
	23	Power Systems 2	Manitoba	3:30 – 5:10 PM
	24	Electronic Circuits & VLSI 2	Wig & Pen	3:30 – 5:10 PM
	25	Image Processing 1	Brass Lantern	3:30 – 5:10 PM
PS	1	Communications Signal Processing Power Systems Electronics Software	Saskatchewan C (Upper Level)	1:30 – 4:30 PM

Tuesday Sessions

Session		Topic	Room	Time
TM	11	CDMA & UWB	Courtyard	8:00 – 9:40 AM
	12	Comp. Networks & Systems 2	Saskatoon	8:00 – 9:40 AM
	13	Power Electronics 1	Manitoba	8:00 – 9:40 AM
	14	Real Time Embedded Systems	Wig & Pen	8:00 – 9:40 AM
	15	Image Processing 2	Brass Lantern	8:00 – 9:40 AM
TM	21	Transceiver Algorithm	Courtyard	10:00 – 11:40 AM
	22	Digital Signal Processing 3	Saskatoon	10:00 – 11:40 AM
	23	Power Systems 3	Manitoba	10:00 – 11:40 AM
	24	Control Theory & Applications 1	Wig & Pen	10:00 – 11:40 AM
	25	Agent-based & Internet-based Systems 1	Brass Lantern	10:00 – 11:40 AM
PS	2	Communications Signal Processing Power Systems Electronics Software	Saskatchewan C (Upper Level)	8:30 – 11:30 AM
TA	11	OFDM & MIMO Systems	Courtyard	1:40 – 3:00 PM
	12	Electronic Materials & Devices	Saskatoon	1:20 – 3:00 PM
	13	Power Systems 4	Manitoba	1:20 – 3:00 PM
	14	Control Theory & Applications 2	Wig & Pen	1:20 – 3:00 PM
	15	Agent-based & Internet-based Systems 2	Brass Lantern	1:20 – 3:00 PM
TA	21	Modulation & Coding	Courtyard	3:30 – 5:30 PM
	22	Biomedical Engineering 1	Saskatoon	3:30 – 5:30 PM
	23	Power Electronics 2	Manitoba	3:30 – 5:30 PM
	24	Advanced Computer Architecture	Wig & Pen	3:30 – 5:30 PM
	25	Neural Networks & Fuzzy Logic	Brass Lantern	3:30 – 5:30 PM
PS	3	Communications Signal Processing Power Systems Electronics Software	Saskatchewan C (Upper Level)	1:30 – 4:30 PM

Wednesday Sessions

Legend:

MM: Monday Morning **MA:** Monday Afternoon **PS:** Poster Session
TM: Tuesday Morning **TA:** Tuesday Afternoon **PS:** Poster Session
WM: Wednesday Morning **WA:** Wednesday Afternoon **PS:** Poster Session

Session		Topic	Room	Time
WM	11	Communications & Networking 2	Courtyard	8:00 – 9:40 AM
	12	Biomedical Engineering 2	Saskatoon	8:00 – 9:40 AM
	13	Power Systems 5	Manitoba	8:00 – 9:40 AM
	14	Analog Electronics & Instrumentation	Wig & Pen	8:00 – 9:40 AM
	15	Transceiver Implementation	Brass Lantern	8:00 – 9:40 AM
WM	21	Source & Channel Coding	Courtyard	10:00 – 11:40 AM
	22	Comp. Networks & Systems 3	Saskatoon	10:00 – 11:40 AM
	23	Electric Machines & Drives 2	Manitoba	10:00 – 11:40 AM
	24	Robotics & Human-Machine Interaction	Wig & Pen	10:00 – 11:40 AM
	25	Ad-Hoc Networks	Brass Lantern	10:00 – 11:40 AM
PS	4	Communications Signal Processing Power Systems Electronics Software	Saskatchewan C (Upper Level)	8:30 – 11:30 AM
WA	1	Micro & Optoelectronics	Courtyard	1:40 – 3:00 PM
	2	Nanotechnology	Saskatoon	1:20 – 3:00 PM
	3	Artificial Intelligence	Manitoba	1:20 – 3:00 PM
	4	Detection & Estimation	Wig & Pen	1:20 – 3:00 PM
	5	Software Engineering 2	Brass Lantern	1:20 – 3:00 PM
PS	5	Communications Signal Processing Power Systems Electronics Software	Saskatchewan C (Upper Level)	1:30 – 3:30 PM

General Information

Registration Desk

The Conference Registration Desk will be set up in the hotel lobby for authors and attendees to register and pick up their conference packages. Hours of operation are:

Sunday, May 1:	12 Noon to 6:00 PM
Monday, May 2:	7:30 AM to 4:00 PM
Tuesday, May 3	7:30 AM to 4:00 PM

If you require emergency assistance outside these hours, please contact the Conference Office (Room 234) or one of the conference volunteers.

Meals and Inclusions

Each ***author, attendee, and full partner registration*** includes the following:

- Sunday Welcome Reception (Saskatchewan B, 7:00 – 9:00 PM)
- Monday, Tuesday, Wednesday Breakfasts
- Monday Tuesday, Wednesday Lunches
- Monday evening Banquet (Saskatchewan B, 7:00 – 9:00 PM)

Each ***partner lite registration*** includes the following:

- Sunday Welcome Reception
- Monday, Tuesday, Wednesday Breakfasts

All breakfasts will be held in the Saskatchewan A Ballroom on the upper level.

All lunches and the banquet will be held in the Saskatchewan B Ballroom on the upper level. Extra tickets for lunches (\$30) and the banquet (\$50) will be available from the Registration Desk in the main lobby or the Conference Office (Room 234).

Conference Proceedings CD

Each ***author and attendee full registration*** also includes the Conference Proceedings (on Compact Disk), and an attractive commemorative soft-sided briefcase.

Additional copies of the Conference Proceedings on Compact Disk are available to *fully registered delegates* during the conference from the Conference Office (Room 234) at a cost of \$50 each.

After the conference, Proceedings will be available through IEEE Publications.

Dietary Needs:

If you indicated special dietary needs when your registered, please indicate these to your server at the meals. Your server will glad to help with any special requests.

Internet Access

Internet access is available for conference delegates. It is located on the balcony in the Saskatchewan C Ballroom (upper level) from 8:00 AM to 6:00 PM Monday and Tuesday, and from 8:00 AM to 3:00 PM Wednesday. Hours may be extended if possible. Please check the designated area for updates.

Authors Screening Room

A computer and data projector is available in the Conference Office (Room 234) for authors to verify the software compatibility of their audio/visuals for oral presentations. In addition, all common computers in the internet access area have identical software and may be used (without a data projector) to verify the compatibility of their electronic presentations. Authors are strongly encouraged to verify their presentation before their assigned session and be ready to load it onto the session computer in the appropriate room before the start of your session. Consult your Session Chair or Session Volunteer for accessibility times (normally 15 minutes before the Session start).

Authors are reminded that they ***must use the computers provided in the Session rooms***, and their presentations must be loaded onto these computers BEFORE the session start time. *Laptop and other personal computer cannot be accommodated.*

Messages and Help

A Message Board is available by the Conference Office (Room 234) for the use of attendees and for incoming messages.

If you require help, please contact the Conference Office (Room 234) or any of the conference volunteers.

Exhibits

Sponsor and Supplier exhibits will be located along the mezzanine railing on the upper level outside the Saskatchewan Ballroom from 8:00 AM to 5:30 PM on Tuesday, May 2, and at various other time during the conference.

Partners Program

Conference Organizers have identified a number of optional activities for accompanying persons. A complementary bus tour of Saskatoon is scheduled to leave the hotel lobby at 10:00 AM Monday, May 2. This tour will familiarize you with the Saskatoon area and help you plan activities for the remainder of your stay in the area.

Date	Time	Location
Monday, May 2	Saskatoon Orientation Tour 10:00 AM - Noon	Leave from meeting place in hotel lobby.

Please refer often to the “Partner Program” notice board located near the Registration Desk for organized excursions or activities. If you have any questions or require assistance arranging your itinerary, please ask any of the conference volunteers.

Local Attractions & Events

Saskatoon boasts numerous local attractions for your enjoyment. In addition, there are always a variety of interesting events scheduled in the area. The list below is just a small sampling of the options available to you. Please consult the Conference Office (Room 234) for a complete listing. Our conference volunteers will be happy to assist.

April 30, 2005 - May 1, 2005 : Hub City Radio Control Club Annual Heli Fly

April 30, 2005 - May 1, 2005 : Cyclemania

May 1, 2005 : Saskatoon Symphony Turn of the Century Series

May 3, 2005 - May 4, 2005 : Prov Bowling Tournament

May 6, 2005 - May 8, 2005 : GREASE STARRING FRANKIE AVALON

May 6, 2005 - May 7, 2005 : Vesna Festival

Arlington Frame Gallery

Diefenbaker Canada Centre

Saskatoon Zoo & Forestry Farm Park

Wanuskewin Heritage Park

Collector's Choice Art Gallery

Off Broadway Dinner Theatre

Berry Barn

Western Development Museum

Restaurants

In addition to the fine dining available at the Saskatoon Inn's Botanica restaurant & lounge, there are numerous restaurants in the Saskatoon area that cater to a multitude of tastes and interests. Please ask a conference volunteer or visit the Conference Office to peruse a complete listing.

Airlines and Transportation

Airlines:

Saskatoon John G. Diefenbaker International Airport	975-4274
Air Canada	(Reservations) 1-888-247-2262
	(Arrivals/Departures) 1-888-422-7533
WestJet	(Reservations) 1-800-538-5696
	(Arrivals/Departures) 1-877-929-8646
Northwest Airlines/KLM Royal Dutch Airlines	1-800-225-2525
Lufthansa	1-800-563-5954
Qantas Airways	1-800-227-4585
Transwest Air	1-800-667-9356
Malayasia Airlines	1-800-552-9264
Norcan Airlines	1-866-329-2222

Taxi & Limousine Services:

Connoisseur Limousine Service	477-2200
Deville Limousine Service	384-7999
Saskatoon Luxury Tours Concierge and Car Service	665-0000
Murray's Limousine Service	227-5022
Luxury Limousine Service	230-9503
Saskatoon Radio Cabs	242-1221
United Blueline Taxi	653-3333

Car Rentals:

Budget Car & Truck Rental	244-7925
Avis Car Rental	652-3434
Alamo Rent-A-Car	664-2424
Enterprise Rent-A-Car	652-9119
Hertz Rent-A-Car	373-1161
National Car Rental	665-7703
Thoen's Classic Auto Rentals	652-1830
Thrifty Car Rental	244-8000

[illegible]

Welcome by Conference Chair

May 1, 2005

SHINING LIGHT ON OUR FUTURE

Welcome to the 2005 IEEE Canadian Conference on Electrical and Computer Engineering (CCECE05), Saskatoon, Saskatchewan.

On behalf of the Conference Committee, I would like to welcome all the conference participants and their companions to the 18th Annual CCECE in Saskatoon, Saskatchewan, Canada. This is the first time that the CCECE has been held in Saskatchewan and we offer you a warm welcome to our province, in this our Centennial Year. We hope that in addition to attending the conference you have the opportunity to visit some of the many attractions that Saskatchewan has to offer.

Approximately 1100 abstracts were received for consideration. The program contains 540 papers organized into a number of oral and poster sessions. These papers are available on the CD-ROM issued to all registrants and will also be available through IEEE-Xplore. We invite you to attend the oral and poster sessions and to actively discuss the research concepts, ideas and applications presented. Three workshops scheduled on Sunday afternoon provide a stimulating start to the conference.

The theme for the conference is “SHINING LIGHT ON OUR FUTURE” and the many presentations offer a picture of our future that is innovative and exciting. The Canadian Light Source, located here in Saskatoon, is Canada’s newest science facility and literally shines light on our future. We hope that you will accept our invitation to tour the CLS facility on the campus of the University of Saskatchewan.

We are pleased and excited to host the CCECE05 sponsored by IEEE Canada and the North and South Saskatchewan IEEE Sections. We would like to thank all our sponsors for their support and the many volunteers who have assisted in the organization and operation of CCECE05.

Roy Billinton, FIEEE,
Chair CCECE05.

Le 1^{er} mai 2005

ÉCLAIRONS NOTRE FUTUR

Bienvenue à la Conférence Canadienne de génie électrique et informatique 2005 (CCGEI 2005), organisée par l'IEEE à Saskatoon, Saskatchewan.

Au nom du comité d'organisation de la conférence, je souhaite à tous les participants et à leurs compagnons la bienvenue à la 18^e Conférence Canadienne de génie électrique et informatique (CCGEI 2005). C'est la première fois que la CCGEI a lieu en Saskatchewan et nous sommes très heureux de vous accueillir dans notre province, tout particulièrement cette année alors que nous en fêtons le centenaire. Nous espérons qu'outre votre participation à cette conférence vous aurez l'occasion de visiter certaines des attractions qu'offre la Saskatchewan.

Plus de 1100 résumés de communications nous ont été soumis. Le programme contient 540 de ces communications réparties en présentations orales ou en affiches. Ces communications sont disponibles sur le CD-ROM remis à chaque participant et seront également disponibles sur le site IEEE-Xplore. Nous vous invitons à assister aux sessions orales, à lire les affiches et à participer aux discussions sur les travaux de recherche, les idées nouvelles et les applications présentées. Les trois ateliers prévus dimanche après midi démarrent la conférence de façon tout à fait motivante.

Le thème de cette conférence est « ÉCLAIRONS NOTRE FUTUR » et les nombreuses communications au programme offrent une perspective innovatrice et excitante de ce futur. Le Centre canadien du rayonnement synchrotron (CCRS) qui se trouve ici à Saskatoon, est à ce jour le plus récent des centres scientifiques construits au Canada, et il éclaire littéralement notre futur. Nous espérons que vous accepterez notre invitation à visiter le CCRS situé sur le campus de l'Université de la Saskatchewan.

Nous nous réjouissons d'être les hôtes de la CCGEI patronnée par l'IEEE du Canada et les sections nord et sud de la Saskatchewan. Nous souhaitons remercier tous nos commanditaires pour leur soutien et les nombreux bénévoles qui nous ont aidé à l'organisation et au bon déroulement de la CCGEI 2005.

Roy Billinton, FIEEE,
Président CCGEI05.

Welcome by IEEE Canada President

May 1, 2005

Dear Conference Participant:

On behalf of IEEE Canada, it's my pleasure to welcome you to Saskatoon and the CCECE05.

This year Saskatchewan and its sister province, Alberta, celebrate their 100th anniversaries of entering the Canadian Confederation. This makes Saskatoon an ideal place for this year's conference. The city and its beautiful surroundings offer many amenities for both you and your companion. I encourage you to take advantage of them. You will not be disappointed.

The Conference Committee has been working very hard to make this conference the best. This year the conference attracted 1100 abstracts. This is an indication of the conference's growing reputation. Every year the conference grows bigger and better! As one of the selected authors, I congratulate you.

Whether as an author or a conference attendee, the conference provides an ideal place both to showcase your work with others and to absorb new ideas that may take you in a different direction.

Conferences are the sum of many things. There is something for everybody; you need only look for it. Enjoy and celebrate your visit to a province that is 100 years old this year.

W.O. (Bill) Kennedy, P.Eng., FEIC
2004 – 2005 IEEE Canada President

Le 1^{er} mai 2005

Cher(e)s participant(e)s,

Au nom de IEEE Canada, c'est avec grand plaisir que je vous souhaite la bienvenue à Saskatoon et à CCGEI05.

Cette année, la Saskatchewan et sa province voisine, l'Alberta, célèbrent leurs centenaires en tant que membre de la Confédération canadienne. Ceci fait de Saskatoon l'emplacement idéal pour notre conférence. La ville et ses environs vous offrent de nombreuses facilités pour vous et votre conjoint. Je vous encourage à en profiter. Vous en serez agréablement surpris.

Le comité organisateur a travaillé avec acharnement pour que cette conférence soit la meilleure à laquelle vous ayez participé. La réputation de cette conférence ne cesse de s'accroître. Cette année, nous avons reçu 1,100 présentations. Chaque année, la conférence ne cesse de s'améliorer non seulement avec une plus grande quantité de présentation disponible mais aussi avec des présentations de calibre accru. En tant qu'un des auteurs choisis, je vous félicite.

Que vous soyez un présentateur ou un participant, la conférence est l'endroit idéal pour montrer votre travail et vous exposez à de nouvelles idées qui pourraient vous diriger vers de nouvelles directions.

Les conférences sont le total de plusieurs choses. Prenez le temps de visiter notre conférence. Vous y trouverez quelque chose pour chacun d'entre vous. Amusez-vous bien et profitez de votre visite pour célébrer le centenaire de la Saskatchewan.

W.O. (Bill) Kennedy, P.Eng., FEIC
Président 2004-2005, IEEE Canada

CCECE05 Organizing Committee

General Conference Chair:	Roy Billinton, U of S
Technical Program Chairs:	Safa Kasap, U of S Kunio Takaya, U of S Rama Gokaraju, U of S Raman Paranjape, University of Regina
General Secretary:	Denard Lynch, U of S
Treasurer and Chair of Sponsorship Committee:	David Dodds, U of S
Publicity and Partner Programs Chair:	Hugh Wood, VCom Inc.
Facilities & Accommodations Chair:	Dave Milne, TRILabs, Saskatoon
Student Activities Chairs:	Ron Bolton, U of S Rama Gokaraju, U of S
Special Sessions Chairs:	Andrew Kostiuk, TRILabs, Saskatoon Luigi Benedicenti, University of Regina
IEEE Canada President:	Bill Kennedy
Western Canada Council:	Dave Kemp
Conference Advisory:	Witold Kinsner
Conference Secretariat:	CCECE 2005 Department of Electrical Engineering 57 Campus Drive Saskatoon, SK S7N 5A9 Ph: (306) 966-5473 Fx: (306) 966-5407 E-Mail: ccece05@ieee.org
Webmaster:	Denard Lynch, U of S Bob Alden, IEEE Canada

CCECE05 Technical Program Committee

Technical Program Committee Co-Chairs:

**Safa Kasap,
Kunio Takaya,
Rama Gokaraju,
Raman Paranjape,**

**University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Regina, Canada**

Members:

Anh Dinh
Aryan Sadaat Mehr
Bob Gander
Brian Daku
Carl McCrosky
Chris Haugen
Craig Gelowitz
D.M. Klymyshyn
Daniel Teng
David Dodds
Denard Lynch
Eric Pelet
Eric Salt
Ha Nguyen
Kunio Takaya
Luigi Benedicenti
Mehran Mehrandezh
Nurul Chowdhury
Rajesh Karki
Ralph Deters
Ramakrishna (Rama) Gokaraju
Raman Paranjape
Robert Johanson
Ron Bolton
Roy Billinton
Safa Kasap
Seok-Bum Ko
Sherif Faried
Stephen O'Leary

University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
TRLabs - Edmonton, Canada
TRLabs - Regina, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Regina, Canada
University of Regina, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Regina, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Saskatchewan, Canada
University of Regina, Canada

Sponsors



SaskPower Recruitment

PeoplePower.

We're looking
for great people.

Apply on-line at
saskpower.com



SED

systems & services for the communication industry



DID YOU KNOW that SED Systems, based right here in Saskatoon, is a leading supplier of systems that are used by the communication industry around the world?

Employing the latest technologies for signal processing and transmission, our systems control satellites and deep space probes, test payloads on orbit, connect users, and improve the efficiency of global communication networks. It's exciting stuff, and we do it right here in Saskatoon. Then we deliver our systems around the world.

www.sedsystems.ca

HITACHI
Canadian Industries Ltd.

www.hitachi.sk.ca



**Machining, Fabricating &
Repair Services** **HITACHI**
Inspire the Next



VCom Inc.
*Advanced products for High Speed Data over Cable,
Video on Demand, and Wireless Internet.*

VCom also has a wireless internet service provider.

Wireless and cable internet
Digital, analog and cable television
Web hosting
Domain name registration

VCom Inc.
Formerly WaveCom Electronics
150 Cardinal Place
Saskatoon, SK, S7H 6L7
Ph: (306) 955-7075
Fax: (306) 955-9919
Email: sales@vcom.com
Web: www.vcom.com



**YOUR
Link Inc.**
www.yourlink.ca
Ph: (306) 955-3122 Email: yourlink@yourlink.ca



Workshops

FUZZY NEURAL COMPUTING SYSTEMS: THEORY AND APPLICATIONS

(Sunday, May 1, 2005, Time: 1:00PM to 5:00PM)

Location: Wig and Pen Room

Tuition fee: \$50.00

(Tuition fee includes both notes and refreshments during coffee break)

Madan M. Gupta, Noriyasu Homma, and Zeng-Guang Hou

Summary

Fuzzy neural networks (FNNs), being the product of both fuzzy logic and neural networks are the computational machines with some unique capabilities of dealing with both the numerical data and the linguistic knowledge information. In this tutorial, some basic methodology, morphology, learning and adaptation algorithms of FNNs are discussed extensively. First, elements of fuzzy sets and systems are briefly reviewed in order to provide some necessary mathematical preliminaries for developing FNNs. Also, some basic results of conventional multilayer feedforward neural networks (MFNNs) with a well-known backpropagation (BP) learning algorithm are provided as a basis for FNNs. Several fuzzy logic operations for various types of fuzzy neurons (FNs) which have fuzzy inputs and fuzzy weights are then introduced. Analogous to the backpropagation (BP) learning algorithm for multilayered feedforward neural networks (MFNNs), the concept and formulations of fuzzy backpropagation (FBP) learning algorithms for FNNs are then developed. Moreover, the capabilities and limitations of FNNs consisting of many interconnected FNs are also discussed. The universal approximation capabilities of fuzzy basis function networks (FBFNs) which are represented as a modified version of Gaussian radial basis function networks (GRBFNs) are also addressed. The material presented in this tutorial provides not only an overview of the existing results but also presents some state-of-the-art new achievements and open problems in the field of fuzzy neural computing.

PSCAD/EMTDC Transients Simulation Workshop

Sunday, May 1, 2005, Time: 1:00PM to 5:00PM

Location: 2A23 Engineering, University of Saskatchewan

Tuition fee: \$30.00

(Tuition fee includes notes, refreshments during coffee break and transportation between the conference hotel and workshop)

*Dr. Dharshana Muthumuni
Simulation Research and Support Engineer
Manitoba HVDC Research Centre*

Contents:

The workshop will cover the following. The participants will have the simulation examples loaded on their workshop computers. After a brief explanation, they will open and run these examples to understand the basic considerations.

- 1) Short Discussion on the fundamentals of transient simulation.*
- 2) Simple hands on tutorial to develop a simulation case in PSCAD/EMTDC.*
- 3) Discussion of simulation examples in the following areas*
 - a) Traditional power system studies*
 - b) Distribution network examples*
 - c) Motors and generators*
 - d) Power electronics*
 - e) Power quality*
 - f) Wind farm application examples*
 - g) Distributed generation*
 - h) Other examples*

The National Microelectronics and Photonics Testing Collaboratory: Remote Access to Advanced Test Labs

Sunday, May 1, 2005, 1:00 - 5:00 PM

Location: Manitoba Room

Tuition fee will be covered by CMC
(includes both notes and refreshments during coffee break)

Bob Stevenson , Jeetendar Narsinghani , and James Dietrich

Contents:

1. Introduction to the NMPTC
2. Four Advanced Test Labs: An Overview
3. The Power of Collaboration in Multi-Disciplinary Research
4. The Collaboratory Live Engineering Framework (CLEF)
5. Accessing the Test Labs by Remote Control
6. Perform Standard Tests by Remote Access – Examples and Practice
7. Storing Data Locally for Post-Process Analysis
8. Questions, Answers and Discussion
9. Concluding Remarks

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Canadian Light Source (CLS) Synchrotron

What is a synchrotron?

A synchrotron is a source of brilliant light that scientists can use to view the structure of materials at the molecular level.

A synchrotron produces extremely bright light -- millions of times brighter than sunlight - by using powerful electro-magnets and radio frequency waves to accelerate electrons to nearly the speed of light. This infrared, ultraviolet and X-ray light is shone down beamlines to endstations (small laboratories) where scientists can select different parts of the spectrum to “see” the microscopic nature of matter, right down to the level of the atom.

This new tool can be used to probe the structure of matter and analyze a host of physical, chemical, geological and biological processes. Information obtained by scientists can be used to help design new drugs, examine the structure of surfaces to develop more effective motor oils, build more powerful computer chips, develop new materials for safer medical implants, and help with clean-up of mining wastes, to name just a few applications.

Quick Facts:

- More than 40 synchrotron light sources have been built around the world. The Canadian synchrotron is competitive with the brightest facilities in Japan, the U.S. and Europe.
- At present, more than 400 Canadian scientists and students travel to other countries to use this unique light at foreign synchrotrons.
- More than 2,000 academic, industrial and government researchers a year from across Canada and from other countries are expected to use the facility once the full complement of beamlines is developed. Beamlines carry the synchrotron light to scientific work stations capable of operating 24 hours per day, 7 days per week.
- The CLS building was completed in December 2000. Commissioning (testing) of the synchrotron booster and storage rings was completed in 2003. First light from the storage ring was detected in a diagnostic beamline on December 9, 2003. Commissioning of the first seven beamlines began in January 2004 and will be completed in the spring of 2005.
- Currently, CLSI has more than 100 employees. The work force of scientists, engineers, technicians and administrators is growing to prepare for CLSI Users. Located on the north end of the University of Saskatchewan, next to Innovation Place, one of Canada’s leading high-tech industrial parks, CLSI strengthens Saskatoon’s reputation as “Science City” as a much-needed national R&D facility.

(Source: <http://www.lightsource.ca/education/whatis.php>)

CLS Tour Schedule

Tours of the CLS Saskatoon are available during the conference. Complimentary tickets for these tours will be available from the Registration Desk ***after*** the Plenary Session Monday morning (10:00 AM).

Tour #	Date	Pick Up Time from Hotel
MA1	Mon, May 2	1:10 PM
MA2	Mon, May 2	2:10 PM
TM1	Tue, May 3	9:10 AM
TM2	Tue, May 3	10:10 AM
TA1	Tue, May 3	1:10 PM
TA2	Tue, May 3	2:10 PM

There will be a designated pick up area in the main hotel lobby near the front doors. Please look for signs.

Conference Meals and Events

Welcome Reception

All delegates are welcomed to Saskatoon and CCECE05 by IEEE Canada and the Conference Organizing Committee. This is your opportunity to network with colleagues, renew old friendships, and make new ones over light snacks, refreshments and cocktails*.

Date	Time	Location
Sunday, May 1	7:00 – 9:00 PM	Saskatchewan B

*Cash bar.

Plenary Session

The Conference will open with a brief Plenary Session.

Date	Time	Location
Monday, May 2	8:30 – 9:30 AM	Saskatchewan B

Program

Opening Remarks:

Roy Billinton, General Conference Chair

Welcome to the Province:

Honourable Peter Prebble, Province of Saskatchewan

Welcome to the City:

Mayor Donald Atchison, City of Saskatoon

Presentations:

Mr. Garner Mitchell, SaskPower

President Peter MacKinnon, University of Saskatchewan

Breakfasts & Refreshment Breaks

Breakfasts are included for all full registrants and 'Partner Lite' registrants.

Date	Time	Location
Monday, May 2	7:30 – 8:20 AM	Saskatchewan A
Tuesday, May 3	7:00 – 7:50 AM	Saskatchewan A
Wednesday, May 4	7:00 – 7:50 AM	Saskatchewan A

Refreshment breaks are also provided for all conference delegates.

Date	Time	Location
Monday, May 2	9:30 – 9:50 AM 3:00 – 3:20 PM	Saskatchewan C
Tuesday, May 3	9:30 – 9:50 AM 3:00 – 3:20 PM	Saskatchewan C
Wednesday, May 4	9:30 – 9:50 AM	Saskatchewan C

Lunches

Luncheons are included for all full registrants.

Date	Time	Location
Monday, May 2	11:45 AM – 1:15 PM	Saskatchewan B
Tuesday, May 3	11:45 AM – 1:15 PM	Saskatchewan B
Wednesday, May 4	11:45 AM – 1:15 PM	Saskatchewan B

Monday Luncheon Guest Speaker:

Dr. William Thomlinson, Executive Director, Canadian Light Source

Tuesday Luncheon Guest Speaker:

2005 McNaughton Medal Winner (to be announced)

Tuesday Luncheon Presentations:

CCECE05 Student Paper Awards

Wednesday Luncheon Guest Speaker:

Mr. Kym Wittal, Chief Technology Officer, SaskTel

IEEE Canada Awards Reception & Banquet

IEEE Canada's Annual Awards Banquet is an integral part of the Canadian Conference on Electrical and Computer Engineering, and honours recipients of IEEE Canada awards.

Banquet admission is ***included with all full registrations***. *Extra tickets for guests* will be available at a cost of \$50 each from the Registration Desk or the Conference Office (Room 234).

Date	Time	Location
Monday, May 2	Reception (Cash Bar) 6:00 – 7:00 PM	Saskatchewan C
	Banquet & Awards 7:00 – 9:00 PM	Saskatchewan B

Speaker:

W. O. Kennedy, IEEE Canada President

Awards to be Presented at the 2005 Banquet

E. F. Glass Western Canada Council Merit Award

M. B. Broughton Central Canada Council Merit Award

J. J. Archambault Eastern Canada Council Merit Award

W. S. Read Outstanding Service Award

Outstanding Engineering Educator Award

R. A. Fessenden Medal

A. G. L. McNaughton Medal

Technical Program Details

MAY 2, MONDAY MORNING, 10:00-11:40AM	34
MM1 COURTYARD RM, OPTICAL AND SATELLITE COMMUNICATION.....	34
MM2 SASKATOON RM, COMPUTER NETWORKS AND SYSTEMS L	35
MM3 MANITOBA RM, POWER SYSTEMS L	36
MM4 WIG & PEN RM, ELECTRONIC CIRCUITS AND VLSI L	37
MM5 BRASS LANTERN RM, SOFTWARE ENGINEERING L	38
MAY 2, MONDAY AFTERNOON, 1:40-3:00PM	39
MA11 COURTYARD RM, PROPAGATION AND FADING CHANNELS.....	39
MA12 SASKATOON RM, DIGITAL SIGNAL PROCESSING 1	40
MA13 MANITOBA RM, ELECTRIC MACHINES AND DRIVES 1.....	41
MA14 WIG & PEN RM, DIGITAL ELECTRONICS	42
MA15 BRASS LANTERN RM, EVOLUTIONARY COMPUTING	43
MAY 2, MONDAY AFTERNOON, 3:30-5:10PM	44
MA21 COURTYARD RM, COMMUNICATION AND NETWORKING 1	44
MA22 SASKATOON RM, DIGITAL SIGNAL PROCESSING 2	45
MA23 MANITOBA RM, POWER SYSTEMS 2.....	46
MA24 WIG & PEN RM, ELECTRONIC CIRCUITS AND VLSI 2.....	47
MA25 BRASS LANTERN RM, IMAGE PROCESSING 1	48
MAY 2, MONDAY AFTERNOON, 1:30-4:30PM	49
POSTER SESSION 1, SASKATCHEWAN C, COMMUNICATION.....	49
POSTER SESSION 1, SASKATCHEWAN C, SIGNAL PROCESSING	52
POSTER SESSION 1, SASKATCHEWAN C, POWER SYSTEMS	53
POSTER SESSION 1, SASKATCHEWAN C, ELECTRONICS.....	54
POSTER SESSION 1, SASKATCHEWAN C, SOFTWARE.....	55

MAY 3, TUESDAY MORNING, 8:00-9:40AM	57
TM11 COURTYARD RM, CDMA AND UWB	57
TM12 SASKATOON RM, COMPUTER NETWORK AND SYSTEMS 2	58
TM13 MANITOBA RM, POWER ELECTRONICS 1	59
TM14 WIG & PEN RM, REAL TIME EMBEDDED SYSTEMS	60
TM15 BRASS LANTERN RM, IMAGE PROCESSING 2	61
MAY 3, TUESDAY MORNING, 10:00-11:40AM	62
TM21 COURTYARD RM, TRANSCEIVER ALGORITHM	62
TM22 SASKATOON RM, DIGITAL SIGNAL PROCESSING 3	63
TM23 MANITOBA RM, POWER SYSTEMS 3	64
TM24 WIG & PEN RM, CONTROL THEORY AND APPLICATIONS 1	65
TM25 BRASS LANTERN RM, AGENT-BASED AND INTERNET-BASED SYSTEMS 1	66
MAY 3, TUESDAY MORNING, 8:30-11:30AM	67
POSTER SESSION 2, SASKATCHEWAN C, COMMUNICATION	67
POSTER SESSION 2, SASKATCHEWAN C, SIGNAL PROCESSING	70
POSTER SESSION 2, SASKATCHEWAN C, POWER SYSTEMS	71
POSTER SESSION 2, SASKATCHEWAN C, ELECTRONICS	72
POSTER SESSION 2, SASKATCHEWAN C, SOFTWARE	74
MAY 3, TUESDAY AFTERNOON, 1:40-3:00PM	75
TA11 COURTYARD RM, OFDM AND MIMO SYSTEMS	75
TA12 SASKATOON RM, ELECTRONIC MATERIALS AND DEVICES	76
TA13 MANITOBA RM, POWER SYSTEMS 4	77
TA14 WIG & PEN RM, CONTROL THEORY AND APPLICATIONS 2	78
TA15 BRASS LANTERN RM, AGENT-BASED AND INTERNET-BASED SYSTEMS 2	79
MAY 3, TUESDAY AFTERNOON, 3:30-5:30PM	80
TA21 COURTYARD RM, MODULATION AND CODING	80
TA22 SASKATOON RM, BIOMEDICAL ENGINEERING 1	81
TA23 MANITOBA RM, POWER ELECTRONICS 2	82
TA24 WIG & PEN RM, ADVANCED COMPUTER ARCHITECTURE	83
TA25 BRASS LANTERN RM, NEURAL NETWORKS AND FUZZY LOGIC	84
MAY 3, TUESDAY AFTERNOON, 1:30-4:30PM	85
POSTER SESSION 3, SASKATCHEWAN C, COMMUNICATION	85
POSTER SESSION 3, SASKATCHEWAN C, SIGNAL PROCESSING	87
POSTER SESSION 3, SASKATCHEWAN C, POWER SYSTEMS	89
POSTER SESSION 3, SASKATCHEWAN C, ELECTRONICS	90
POSTER SESSION 3, SASKATCHEWAN C, SOFTWARE	92

MAY 4, WEDNESDAY MORNING, 8:00-9:40AM	94
WM11 COURTYARD RM, COMMUNICATIONS AND NETWORKING 2.....	94
WM12 SASKATOON RM, BIOMEDICAL ENGINEERING 2.....	95
WM13 MANITOBA RM, POWER SYSTEMS 5	96
WM14 WIG & PEN RM, ANALOG ELECTRONICS AND INSTRUMENTATION	97
WM15 BRASS LANTERN RM, TRANSCEIVER IMPLEMENTATION	98
MAY 4, WEDNESDAY MORNING, 10:00-11:40AM.....	99
WM21 COURTYARD RM, SOURCE AND CHANNEL CODING	99
WM22 SASKATOON RM, COMPUTER NETWORKS AND SYSTEMS 3.....	100
WM23 MANITOBA RM, ELECTRIC MACHINES AND DRIVES 2	101
WM24 WIG & PEN RM, ROBOTICS AND HUMAN-MACHINE INTERACTION.....	102
WM25 BRASS LANTERN RM, AD-HOC NETWORKS.....	103
MAY 4, WEDNESDAY MORNING, 8:30-11:30AM.....	104
POSTER SESSION 4, SASKATCHEWAN C, COMMUNICATION.....	104
POSTER SESSION 4, SASKATCHEWAN C, SIGNAL PROCESSING	106
POSTER SESSION 4, SASKATCHEWAN C, POWER SYSTEMS	107
POSTER SESSION 4, SASKATCHEWAN C, ELECTRONICS.....	109
POSTER SESSION 4, SASKATCHEWAN C, SOFTWARE	111
MAY 4, WEDNESDAY AFTERNOON, 1:40-3:00PM.....	113
WA1 COURTYARD RM, MICROELECTRONICS AND OPTOELECTRONICS	113
WA2 SASKATOON RM, NANOTECHNOLOGY.....	114
WA3 MANITOBA RM, ARTIFICIAL INTELLIGENCE	115
WA4 WIG & PEN RM, DETECTION AND ESTIMATION.....	116
WA5 BRASS LANTERN RM, SOFTWARE ENGINEERING 2	117
MAY 4, WEDNESDAY AFTERNOON, 1:30-3:00PM.....	118
POSTER SESSION 5, SASKATCHEWAN C, COMMUNICATION.....	118
POSTER SESSION 5, SASKATCHEWAN C, SIGNAL PROCESSING	120
POSTER SESSION 5, SASKATCHEWAN C, POWER SYSTEMS	122
POSTER SESSION 5, SASKATCHEWAN C, ELECTRONICS.....	124
POSTER SESSION 5, SASKATCHEWAN C, SOFTWARE	126

May 2, Monday Morning, 10:00-11:40am

MM1 Courtyard Rm, Optical and Satellite Communication

Chair: Xavier Fernando (Ryerson University, Canada)

1568952372	<i>Estimation of Radio-Over-Fiber Uplink in a Multiuser CDMA Environment using PN Spreading Codes</i>
	Stephen Pinter and Xavier Fernando (Ryerson University, Canada)
1568952437	<i>Geosynchronous Satellite Systems Design Considerations and Optimization Methodology</i>
	Ali Grami (University of Ontario Institute of Technology, Canada)
1568952681	<i>Two-Dimensional Optical CDMA Systems With Multi-Wavelength Pulse Modulation and Double Hard-Limiters</i>
	Jianfeng Weng, Ping Wang and Tho Le-Ngoc (McGill University, Canada)
1568952707	<i>Design of Single Mode SMF, NZ-DSF and DCF Optical Fibers</i>
	Shamim Shahriar Hossain and Alan Couchman (Monash University, Australia)
1568952738	<i>Parameter Estimation and Performance Evaluation of a Time-Varying Multipath Satellite Channel</i>
	Quazi Mehbubar Rahman (St. Francis Xavier University, Canada), Mohamed Ibnkahla and Mohamed Bayoumi (Queen's University, Canada)

May 2, Monday Morning, 10:00-11:40am

MM2 Saskatoon Rm, Computer Networks and Systems 1

Chair: Howard Heys (Memorial University of Newfoundland, Canada)

1568953219	<i>The effectiveness of vaccinations on the spread of email-borne computer viruses</i>
	Suprakash Datta and Hui Wang (York University, Canada)
1568953160	<i>A Comparison Between BECN-Capable TCP New-Reno and TCP Vegas</i>
	Ali Dabir, Ioannis Lambadaris and Rupinder Makkar (Carleton University, Canada)
1568951638	<i>A Timing Attack on the CIKS-1 Block Cipher</i>
	Michael Furlong and Howard Heys (Memorial University of Newfoundland, Canada)
1568951032	<i>An interactive 3D world built on a transactional operating system</i>
	Markus Fakler, Stefan Frenz, Ralph Goeckelmann, Michael Schoettner and Peter Schulthess (University of Ulm, Germany)
1568950059	<i>The Adoption of Dynamic Weight Mapping Function in Adaptive Routing</i>
	Feng Xia and M. Robert Ito (University of British Columbia, Canada)

May 2, Monday Morning, 10:00-11:40am

MM3 Manitoba Rm, Power Systems 1

Chair: Robert T.H. (Bob) Alden (McMaster University, Canada)

1568952693	<i>Real-Time Phasor Measurement Method including a GPS Common Time-stamp for Distributed Power System Monitoring and Control</i>
	Eric Chen, Hamid Shokrollah Timorabadi and Francis Dawson (University of Toronto, Canada)
1568950825	<i>Reliability Performance Index Probability Distribution Analysis of Bulk Electricity Systems</i>
	Wijarn Wangdee and Roy Billinton (University of Saskatchewan, Canada)
1568951329	<i>Optimal Design of Power Electronic Systems Using Electromagnetic Transient Simulation</i>
	Shaahin Filizadeh and Ani Gole (University of Manitoba, Canada)
1568949135	<i>An Improved Voltage Phasor Estimation Technique to Minimize the Impact of CCVT Transients in Distance Protection</i>
	Eli Pajuelo, G. Ramakrishna and Mohindar S. Sachdev (University of Saskatchewan, Canada)
1568953005	<i>A Voltage Sourced Based Hybrid Converter for HVDC Transmission</i>
	Behzad Qahraman and Ani Gole (University of Manitoba, Canada)

May 2, Monday Morning, 10:00-11:40am

MM4 Wig & Pen Rm, Electronic Circuits and VLSI 1

Chair: Duncan Elliott (University of Alberta, Canada)

1568953244	<i>A Fast, Pipelined Implementation of a Two-Dimensional Inverse Discrete Cosine Transform</i>
	Ramkrishna Swamy, Maziyar Khorasani, Yongjie Liu, Duncan Elliott and Stephen Bates (University of Alberta, Canada)
1568953031	<i>STE based verification of the Look-Aside Interface</i>
	Donglin Li, Asif Iqbal Ahmed and Otmane Ait Mohamed (Concordia University, Canada)
1568952047	<i>A 0.65V, 2.4GHz CMOS low-noise amplifiers design with noise optimization</i>
	M.Zamin Khan, Yanjie Wang, S. Masood Ali and R. Raut (Concordia University, Canada)
1568948681	<i>Generating Diverse Pools of Steiner Trees for VLSI Routing</i>
	Gary Grewal, Xiaoping Yu and Ming Xu (University of Guelph, Canada)
1568952574	<i>A 1.8 V 1.1 GHz Novel Digital Multiplier</i>
	Amir Ali Khatibzadeh, Kaamran Raahemifar and Majid Ahmadi (University of Windsor, Canada)

May 2, Monday Morning, 10:00-11:40am

MM5 Brass Lantern Rm, Software Engineering 1

Chair: Luigi Benedicenti (University of Regina, Canada)

1568951321	<i>Design Patterns and Object-Oriented Software Testing</i>
	Paul Dasiewicz (University of Waterloo, Canada)
1568948909	<i>Towards Providing Decision Support for COTS Selection</i>
	Tom Wanyama and Behrouz Homayoun Far (University of Calgary, Canada)
1568952482	<i>The Use of Multiple Proxies for Fast Download</i>
	Tao Gong (University of Manitoba, Canada)
1568953387	<i>Formal Approaches to Requirements Engineering: From Behavior Trees to Alloy</i>
	Wissam Itani (University of Ottawa, Canada) and Luigi Logrippo (Université du Quebec à l'Outaouais, Canada)
1568953266	<i>The Impact of Intercultural Factors on Global Software Development</i>
	Eve MacGregor, Yvonne Hsieh and Philippe Kruchten (University of British Columbia, Canada)

May 2, Monday Afternoon, 1:40-3:00pm

MA11 Courtyard Rm, Propagation and Fading Channels

Chair: Eric Salt (University of Saskatchewan, Canada)

1568951673	<i>Simple Tests to Predict Fading in Tree Obstructed MMDS Channel</i>
	Eric Pelet, Eric Salt (University of Saskatchewan, Canada) and Garth Wells (TRLabs- Saskatoon, Canada)
1568953169	<i>A Cross-Correlation MIMO Channel Model for Non-Isotropic Scattering Environment and Non-Omnidirectional Antennas</i>
	Hamidreza Saligheh Rad and Saeed Gazor (Queen's University, Canada)
1568953233	<i>A Propagation Measurement- Based Analysis of Frequency Hopping Systems on VHF Mobile Fading Channels</i>
	Jeffrey A. Pugh, Philip J. Vigneron and Robert J.C. Bultitude (Communications Research Centre, Canada)
1568953268	<i>Channel Characterization and Antenna Diversity in a 6 MHz DVB-T Channel</i>
	Pham Viet Ha, Jean-Yves Chouinard, Sili Lu and Asia Semmar (Université Laval, Canada)

May 2, Monday Afternoon, 1:20-3:00pm

MA12 Saskatoon Rm, Digital Signal Processing 1

Chair: Pan Agathoklis (University of Victoria, Canada)

1568953068	<i>Design of PC Programmable Digital Hearing-Testing Device</i> Jasbir N. Patel and Zine-Eddine Abid (University of Western Ontario, Canada)
1568952220	<i>60-Channel Dual Tone Multi-frequency Signaling Receiver Based on Goertzel Algorithm on Single 100 MIPS TMS320C54 DSP Platform</i> Saeed Khalesehosseni, Reza Pasand and John Nielsen (University of Calgary, Canada)
1568951800	<i>Stepped Frequency Seismic Method with Acquisition Time Optimization</i> David G. Scharbach and David E. Dodds (University of Saskatchewan, Canada)
1568953246	<i>Characterization of the Energy Spectral Density for a Potash Mine</i> Angus Errington, Brian Daku, David Dodds (University of Saskatchewan, Canada) and Arnfinn Prugger (Potash Corporation of Saskatchewan Inc., Canada)
1568951181	<i>An Improved Spectral Subtraction Speech Enhancement System by Using an Adaptive Spectral Estimator</i> Saeed Ayat, Mohamad T. Manzuri, Roohollah Dianat (Sharif University of Technology, Iran) and Jahanshah Kabudian (Amirkabir University of Technology, Iran)

May 2, Monday Afternoon, 1:20-3:00pm

MA13 Manitoba Rm, Electric Machines and Drives 1

Chair: Narayan C. Kar (University of Windsor, Canada)

1568951473	<i>A Coupled Electromagnetic-Mechanical Finite Element Approach for the Transient Analysis of Squirrel Cage Induction Motors</i>
	Christian Grabner (Research and Development Motors, Siemens AG, Germany)
1568952894	<i>Optimal PI Controller Gains Using a Multi-Loop Multi-Objective Genetic Algorithm in IM Drives</i>
	Hossein Madadi Kojabadi (Sahand University of Technology, Iran), Qiwei Cao, Liuchen Chang (University of New Brunswick, Canada), Mohsen Ghribi and A. Dupuis (Université de Moncton, Canada)
1568953030	<i>Filter Based Torque Ripple Minimization of an Adaptive Neuro-Fuzzy Controller for Induction Motor</i>
	Hao Wen and M. Nasir Uddin (Lakehead University, Canada)
1568948947	<i>Deflection Response of Electro-Thermal Actuators to Voltage and Power</i>
	Robert W. Johnstone and M. Parameswaran (Simon Fraser University, Canada)
1568952051	<i>Design Studies on Low Voltage Contactors by using Transient Finite Element Analyses with Circuit Coupling</i>
	Erich Schmidt (Vienna University of Technology, Austria) and Andreas Degwerth (Kraus & Naimer Gruppe, K & N Schalterentwicklung GmbH, Austria)

May 2, Monday Afternoon, 1:20-3:00pm

MA14 Wig & Pen Rm, Digital Electronics

Chair: Li Chen (South Dakota School of Mines and Technology, USA)

1568953190	<i>Configurable SRAM Macro Design to Resist Total Dose Effects</i>
	Li Chen (South Dakota School of Mines and Technology, USA) and Douglas M. Gingrich (University of Alberta, Canada)
1568953071	<i>New Parallel Multipliers based on Low Power Adders</i>
	Rizwan Mudassir and Zine-Eddine Abid (University of Western Ontario, Canada)
1568953348	<i>An Encoder for a 5GS/s 4-bit Flash A/D Converter in 0.18 μm CMOS</i>
	Samad Sheikhaei, Shahriar Mirabbasi and Andre Ivanov (University of British Columbia, Canada)
1568953217	<i>Auto-calibration Technique for On-chip Reference Voltage Generation in Ferroelectric Memories</i>
	Kamlesh R. Raiter and Bruce F. Cockburn (University of Alberta, Canada)
1568952888	<i>Effective Implementation of Floating-point Adder using Pipelined LOP in FPGAs</i>
	Ali Malik and Seok-Bum Ko (University of Saskatchewan)

May 2, Monday Afternoon, 1:20-3:00pm

MA15 Brass Lantern Rm, Evolutionary Computing

Chair: Kunio Takaya (University of Saskatchewan, Canada)

1568953222	<i>An Evolutionary Strategy Based Motion Estimation Algorithm for H.264 Video Codec</i>
	S. Adedoyin, W.A.C. Fernando, H. Kodikara Arachchi, T. Kalganova and K.K. Loo (Brunel University, United Kingdom)
1568953261	<i>Implementation of Three SIMD Algorithms for Graphical User Interface Processing in Mobile Devices Using the Atsana J2210 Media Processor</i>
	Kristopher Breen, Jesus Hernandez Tapia and Duncan Elliott (University of Alberta, Canada)
1568953344	<i>Handheld Landmine Avoidance System</i>
	Trevor Cornfield, Yue Gong, Girish Rao, Lin Yang and William Gardner (University of Guelph, Canada)
1568953029	<i>Texture Classification using Wavelet Transform and Support Vector Machines</i>
	Samsher Sidhu and Kaamran Raahemifar (Ryerson University, Canada)
1568952512	<i>The Fusion Framework in a Person Identity Verification System based on Face and Speech Data</i>
	Tertulien Ndjountche (Quebec University at Hull, Canada), Rolf Unbehauen (Erlangen-Nuremberg University, Germany) and Fa-Long Luo (Quicksilver Technology, USA)

May 2, Monday Afternoon, 3:30-5:10pm

MA21 Courtyard Rm, Communication and Networking 1

Chair: Mostafa I. Abd-El-Barr (Kuwait University, Kuwait)

1568952824	<i>Enhanced Efficiency and Flexibility while Supporting QoS Concepts: An Adaptive MAC Framework for 802.11 WLANs</i>
	Jack L. Burbank and William T. Kasch (Johns Hopkins University, USA)
1568952965	<i>Wireless Sensor Networks - Part II: Routing Protocols and Security Issues</i>
	Mostafa I. Abd-El-Barr, Maryam M. Al-Otaibi and Mohamed A. Youssef (Kuwait University, Kuwait)
1568953063	<i>Optimal Power Control for Network-Centric and User-Centric Wireless Networks in Interference-Limited Fading Channels</i>
	Piplu R. Paul, Ashok K. Karmokar and Vijay K. Bhargava (University of British Columbia, Canada)
1568952420	<i>Performance Study of Backpressured Packet Networks Using a Soft Fluid Flow Model</i>
	Azita Zolfaghari (Isfahan University of Technology, Iran) and S. Jamaloddin Golestani (Bell Laboratories, Lucent Technologies, USA)
1568953326	<i>Towards a Security Policy for VoIP Applications</i>
	Miguel Vargas Martin and Patrick C.K. Hung (University of Ontario Institute of Technology, Canada)

May 2, Monday Afternoon, 3:30-5:10pm

MA22 Saskatoon Rm, Digital Signal Processing 2

Chair: Kunio Takaya (University of Saskatchewan, Canada)

1568951797	<i>Motion Vector Search for 2.5D Modeling of Moving Objects in a Video Scene</i>
	Safaa Mohamed and Kunio Takaya (University of Saskatchewan, Canada)
1568953325	<i>Block-Based Motion Estimation Using an Enhanced Flexible Triangle Search Algorithm</i>
	Mohamed Rehan, Pan Agathoklis and Andreas Antoniou (University of Victoria, Canada)
1568953314	<i>Regularization of Textured Image Decomposition via a Geometric Constraint</i>
	Reza Shahidi and Cecilia Moloney (Memorial University of Newfoundland, Canada)
1568952872	<i>Anisotropic Diffusion in Synthetic Aperture Radars</i>
	Sathit Intajag, Vittaya Tipsuwanpon and Fusak Cheevasuwit (King Mongkut's Institute of Technology Ladkrabang, Thailand)
1568951755	<i>A New Rectangular Partitioning Based Lossless Binary Image Compression Scheme</i>
	Saif Zahir and Mehmood Naqvi (University of Northern British Columbia, Canada)

May 2, Monday Afternoon, 3:30-5:10pm

MA23 Manitoba Rm, Power Systems 2

Chair: Rajesh Karki (University of Saskatchewan, Canada)

1568951732	<i>Composite System Reliability Evaluation Incorporating Protection System Failures</i>
	Mohammad Chehrehghani Bozchalui, Mohammad Sanaye-Pasand (University of Tehran, Iran) and Mahmud Fotuhi-Firuzabad (Sharif University of Technology, Iran)
1568951206	<i>Transmission System Adequacy Evaluation Considering Wind Power</i>
	Rajesh Karki and Jaiminkumar Patel (University of Saskatchewan, Canada)
1568950822	<i>Impacts of Energy Storage on Power System Reliability Performance</i>
	Bagen and Roy Billinton (University of Saskatchewan, Canada)
1568952776	<i>Reliability Study of a Distributed Generation System Based on Renewable Energy</i>
	Jian Wang, Longyun Kang, Binggang Cao (Xi'an Jiaotong University, P.R. China) and Liuchen Chang (University of New Brunswick, Canada)
1568951333	<i>A Basic Method for Composite Power System Expansion Planning Considering Probabilistic Reliability Criteria</i>
	Jaeseok Choi, TranTrung Tinh (Gyeongsang National University, Republic of Korea), Abdurrahim El-Keib (The University of Alabama, USA), Robert Thomas (Cornell University, USA) and Roy Billinton (University of Saskatchewan, Canada)

May 2, Monday Afternoon, 3:30-5:10pm

MA24 Wig & Pen Rm, Electronic Circuits and VLSI 2

Chair: Gul N. Khan (Ryerson University, Canada)

1568951530	<i>VLSI Thermo-Mechanical Stress Analysis by Gradient Direction Sensor Method</i>
	Mohammed Bougataya, Ahmed Lakhsasi (Université du Québec en Outaouais, Canada) and Daniel Massicotte (Université du Québec à Trois-Rivières, Canada)
1568953124	<i>Impact of Low K Dielectrics on Microelectronics Reliability</i>
	Don Scansen, Ray Haythornthwaite and Sue Brown (Semiconductor Insights, Canada)
1568953059	<i>Fast Transient Analysis of Oscillators Using Multiple Time Scales with Accurate Initial Conditions</i>
	Lei Zhu and Carlos E. Christoffersen (Lakehead University, Canada)
1568951330	<i>A New Processor Allocation and Pipelining Approach for Hardware Software Co-Synthesis</i>
	Usman Ahmed and Gul N. Khan (Ryerson University, Canada)
1568951669	<i>Analysis of DC Simulation Convergence of Nonlinear Analog Circuits with Initial Solution</i>
	Michel Morneau and Abdelhakim Khouas (École Polytechnique de Montréal, Canada)

May 2, Monday Afternoon, 3:30-5:10pm

MA25 Brass Lantern Rm, Image Processing 1

Chair: Xue Dong Yang (University of Regina, Canada)

1568948668	<i>Processing of Two-Dimensional Data with Use of Two-Rate Kohonen's Neural Networks</i>
	Igor Astrov, Svetlana Tatarly and Ennu Rüstern (Tallinn University of Technology, Estonia)
1568953290	<i>3D Characteristic Facial Contours</i>
	Xue Dong Yang, William Xu and Boting Yang (University of Regina, Canada)
1568951694	<i>A Dual Metric Approach Towards Similarity Measurement in Image Registration</i>
	Indranil Sarkar and Raj Sharman (State University of New York at Buffalo, USA)
1568952982	<i>Robust Data Hiding with Image Invariants</i>
	Yongqing Xin (University of Manitoba, Canada), Simon X. Liao (University of Manitoba, Canada) and Mirosław Pawlak (University of Manitoba, Canada)
1568952542	<i>System Configuration of Facial Identification Based on Isodensity Maps.</i>
	Hiroshi Ono and Osamu Nakamura (Kogakuin University, Japan)

May 2, Monday Afternoon, 1:30-4:30pm

Poster Session 1, Saskatchewan C, Communication

Chair: Aryan Saadat Mehr (University of Saskatchewan, Canada)

1568952638	C1	<i>Current and Future Developments Related to the SONET</i> Arjumand Ateeq, Luke Kumar, Martin Bednarek, Shaowen Song and Tianying Ji (Wilfrid Laurier University, Canada)
1568953149	C2	<i>Survivable Traffic Grooming in Optical Networks with Multiple Failures</i> Wei Huo, Lei Guang, Chadi Assi (Concordia University, Canada) and Abdallah Shami (University of Western Ontario, Canada)
1568953294	C3	<i>Coding in Optical CDMA Networks with M-ary Modulation: Impact of Selected Physical Imperfections</i> Aminata A. Garba and Jan Bajcsy (McGill University, Canada)
1568953337	C4	<i>Applying Time-Division-Multiplexing in Star-Based Optical Networks</i> M. Jin, O. Yang, Y. Zhang, A.G.P. Rahbar and W. Yang (University of Ottawa Ottawa, Canada)
1568950193	C5	<i>A Novel LS-code Access Method In MC-CDMA System To Overcome Frequency Offset</i> Zheng Wang, Yuping Zhao (Peking University, P.R. China) and Yu Zhang (Beijing Putian Founder Communications Inc., P.R. China)
1568953349	C6	<i>A Novel Packet Scheduling Scheme Based On Adaptive Power/Delay for Efficient Resource Allocation in Downlink CDMA Systems</i> Jin Yuan Sun, Yi Fan Peng and Lian Zhao (Ryerson University, Canada)
1568950723	C7	<i>Capacity of Ultra-Wideband Transmission with Pulse Position Amplitude Modulation and a RAKE Reception</i> Wei Li, T. Aaron Gulliver and Hao Zhang (University of Victoria, Canada)
1568950275	C8	<i>Research on improvement in the Handoff Performance for High-Speed Mobile Service</i> Cao Dazhong, Xu Jing, Wang Peng and Kaihua Liu (Tianjin University, P.R. China)

1568951011	C9	<i>Méthodologie de Planification des Futurs Réseaux Mobiles</i>
		Ronald Beaubrun (Université Laval, Canada), Samuel Pierre and Jean Conan (École Polytechnique de Montréal, Canada)
1568952963	C10	<i>Wireless Sensor Networks - Part I: Topology and Design Issues</i>
		Mostafa I. Abd-El-Barr, Mohamed A. M. Youssef and Mariam M. Al-Otaibi (Kuwait University, Kuwait)
1568951250	C11	<i>An Efficient SIM-Based Authentication and Key Distribution Method for Wireless LANs</i>
		Xiao Liu and Abraham O. Fapojuwo (University of Calgary, Canada)
1568953067	C12	<i>Modern Power Architectures for Optical Network Systems</i>
		Martin Plesnik (Innovance Networks, Canada)
1568953331	C13	<i>Robust and Accurate BER Computation for M-ary Orthogonal Signaling on a Discrete Memoryless Channel</i>
		Norman C. Beaulieu and Lingzhi Cao (University of Alberta, Canada)
1568950772	C14	<i>Enhanced Polling Mechanism of Bluetooth for Realtime Traffic</i>
		Yan Jiang, Zhigang Jin, Shaoqing Meng, Yantai Shu and Lianfang Zhang (Tianjin University, P.R. China)
1568952907	C15	<i>Approaching Ergodic Capacity In Time Varying MIMO V-Blast Channels</i>
		Khalida Ghanem and Tayeb A. Denidni (Université du Québec, Canada)
1568953248	C16	<i>A Deterministic Direction Finding Approach Using a Single Snapshot of Array Measurement</i>
		K.-L. Du and M.N.S. Swamy (Concordia University, Canada)
1568953371	C17	<i>Indirect Method of RCS Estimate of Conducting Target in Random Medium</i>
		Hosam El-Ocla (Lakehead University, Canada)
1568953340	C18	<i>Reduced Size Electromagnetic Band Gap (EBG) Structures for Antenna Applications</i>
		George S. A. Shaker and S. Safavi-Naeini (University of Waterloo, Canada)

1568953213	C19	<i>A Reduced Complexity Multi-Rate Echo Canceller for DMT Based DSL Systems</i>
		Jean Francois Marceau and Benoît Champagne (McGill University, Canada)
1568948433	C20	<i>A Blind Adaptive beamforming for OFDM System</i>
		Hongwu Liu and Quanyuan Feng (Southwest Jiaotong University, P.R. China)
1568951389	C21	<i>Performance Analysis of Synchronous M-Ary Time-Hopping PPM UWB Multiple-Access Communication Systems</i>
		Reza Pasand, Saeed Khalesehoseini and John Nielsen (University of Calgary, Canada)
1568952438	C22	<i>A High-Capacity Broadband Satellite System Offering High-Speed Internet Access and Multimedia Services</i>
		Ali Grami (University of Ontario and Institute of Technology, Canada)

May 2, Monday Afternoon, 1:30-4:30pm

Poster Session 1, Saskatchewan C, Signal Processing

1568952588	SP1	<i>A Level Dependent Compression Scheme For Automatic Speaker Independent Speech Recognition</i>
		Jalal Karam (Arab Open University, Lebanon)
1568952974	SP2	<i>Automatic Speaker Recognition with Formant Trajectory tracking using CART and Neural Networks</i>
		Mohammad M. Tanabian, Patrick Tierney and Bahram Zahir Azami (Hivva Technologies, Canada)
1568952811	SP3	<i>Implementation of a High-Frequency Digital Lock-in Amplifier</i>
		Maximiliano O. Sonnaillon, Raúl Urteaga, Fabián José Bonetto (Instituto Balseiro / Cavitation and Biotechnology Lab, Argentina) and Martín Ordoñez (Memorial University of Newfoundland, Canada)
1568950909	SP4	<i>Analysis of the Coefficients of Generalized Bilinear Transformation in the Design of 2-D Band-Pass and Band-Stop Filters and an Application in Image Processing</i>
		Karthikeya K. Sundaram and Venkatanarayana Ramachandran (Concordia University, Canada)
1568951654	SP5	<i>A Multiplier-free NLMS algorithm for Adaptive IIR Filtering</i>
		Salah Ameer (University of Waterloo, Canada) and Behnam Shahravva (University of Windsor, Canada)
1568953274	SP6	<i>Compression of Multifractal Object Boundaries: A Comparison of Two Approaches</i>
		S. Siddiqui, A. El-Boustani and W. Kinsner (University of Manitoba, Canada)
1568953220	SP7	<i>Robust Recognition of Noisy Speech over H.323 Networks</i>
		Gang Chen, Hesham Tolba and Douglas O'Shaughnessy (Université du Québec, Canada)
1568953126	SP8	<i>A 0.65V CMOS Power Amplifier for Biotelemetry Applications</i>
		Munir El-Desouki, M. Jamal Deen and Yaser M. Haddara (McMaster University, Canada)
1568953001	SP9	<i>Modeling of the Scaffold Fabrication Process for Tissue Engineering Applications</i>
		Hui Ke and X.B. Chen (Department of Mechanical Engineering, University of Saskatchewan, Canada)

May 2, Monday Afternoon, 1:30-4:30pm

Poster Session 1, Saskatchewan C, Power Systems

1568952893	P1	<i>Novel SVPWM-based Predictive Current Controller for Three-Phase Grid-Connected Inverters</i>
		Qingrong Zeng and Liuchen Chang (University of New Brunswick, Canada)
1568952579	P2	<i>Properties and Characteristics of Voltage-fed Single-Stage Converters</i>
		Gerry Moschopoulos, Sondeep Bassan, Shumin Li and Qingyi Su (University of Western Ontario, Canada)
1568952577	P3	<i>Three-Phase Rectifiers with Power Factor Correction</i>
		Jayesh Shah and Gerry Moschopoulos (University of Western Ontario, Canada)
1568953158	P4	<i>A New Control Algorithm for 3-Phase PWM Voltage Source Converters Connected to the Grid</i>
		Robert Thibault, Kamal Al-Haddad and Louis. A. Dessaint (École de technologie supérieure, Canada)
1568952973	P5	<i>A New Discrete Packaging configuration of Bidirectional Power Switch with Less Magnetic Interference</i>
		Handy Blanchette and Kamal Al-Haddad (École de technologie supérieure, Canada)
1568952826	P6	<i>Stator Inter-Turn Fault Analysis of Reluctance Synchronous Motor</i>
		Prabhakar Neti and Subhasis Nandi (University of Victoria, Canada)
1568953833	P7	<i>Sliding-Mode Control of A Servomotor-Pump in a Position Control Application</i>
		Marc Perron , Jean de Lafontaine (Université de Sherbrooke, Canada) and Yvon Desjardins (Centre Hydraulique Hydrep Inc, Canada)
1568948601	P8	<i>Adaptation et Optimisation en Ligne Floue des Paramètres du Regulateur PI Appliquée à un Moteur à Induction</i>
		Kouider Laroussi and Mimoune Zelmat (Centre universitaire de Djelfa, Algeria)

May 2, Monday Afternoon, 1:30-4:30pm

Poster Session 1, Saskatchewan C, Electronics

1568953152	E1	<i>Recent Advances in High-Speed Serial I/O Trends, Standards and Techniques</i>
		Peter Noel, Farhad Zarkeshvari and Tad Kwasniewski (Carleton University)
1568953034	E2	<i>Single-chip FPGA Implementation of a Pipelined, Memory-Based AES Rijndael Encryption Design</i>
		Kenneth Stevens and Otmane Ait Mohamed (Concordia University, Canada)
1568952892	E3	<i>Efficient FPGA Implementation of FFT Based Multipliers</i>
		Lo Sing Cheng, Ali Miri and Tet Hin Yeap (University of Ottawa, Canada)
1568953123	E4	<i>Architecture of Wavelet Packet Transform for 1-D Signal</i>
		Aroutchelvame, S.M. and K. Raahemifar (Ryerson University, Canada)
1568953299	E5	<i>An Executable Specification of the PCI-X Bus Standard in AsmL</i>
		Haja Moinudeen, Ali Habibi and Sofiène Tahar (Concordia University, Canada)
1568952698	E6	<i>VLSI Design of a High Speed, Low Power And Area Efficient MAC</i>
		Neha Jain, Brajesh Kaushik, Bhavana Jharia and R. P. Agarwal (Indian Institute of Technology-Roorkee, India)
1568953313	E7	<i>Real-Time Video Watermarking on Programmable Graphics Hardware</i>
		Alan Brunton and Jiying Zhao (University of Ottawa, Canada)
1568951686	E8	<i>A High-Performance Redundant Binary Based Fixed-Point Divider</i>
		Abderrahmane Bennis and Monte Tull (University of Oklahoma, USA)

May 2, Monday Afternoon, 1:30-4:30pm

Poster Session 1, Saskatchewan C, Software

1568950501	SW1	<i>Maximizing Customer Satisfaction in Maintenance of Software Product Family</i>
		Bin Xu (Gongshang University, P.R. China), Mingkui Yang (Zhejiang University, P.R. China), Hongbing Liang (Dianzi University, P.R. China) and Haibin Zhu (Nipissing University, Canada)
1568953051	SW2	<i>Self-Registering Plug-ins: An Architecture for Extensible Software</i>
		Dia Kharrat and Syed Salman Qadri (University of Western Ontario, Canada)
1568951212	SW3	<i>Processing of Slow Motion Images Out Of Underwater, Ground and Aerial Vehicles</i>
		Zhengmao Ye, Jiecai Luo, Pradeep K. Bhattacharya and Hamid Majleseini (Southern University, USA)
1568951500	SW4	<i>Extraction de contours flous et bruités</i>
		M. Sarifuddin and Hayet Laggoune (Université du Québec, Canada)
1568952159	SW5	<i>Robust Posture Estimation of Human Face in Some Bad Conditions</i>
		M. Sarifuddin and Hayet Laggoune (Université du Québec, Canada)
1568953164	SW6	<i>Robust Image Watermarking with Zernike Moments</i>
		Qing Chen (University of Ottawa, Canada), Xiaoli Yang (Lakehead University, Canada) and Jiying Zhao (University of Ottawa, Canada)
1568952551	SW7	<i>A Hybrid Approach to Reliability Estimation of Mobile Agent-based Systems</i>
		Mosaab Daoud and Qusay H. Mahmoud (University of Guelph, Canada)
1568951676	SW8	<i>The Design of an On-Line Monitor in IMAGO System</i>
		Ning Dai and Xining Li (University of Guelph, Canada)
1568953297	SW9	<i>Statistical Delay Guarantees of VPLS Connections over MPLS Networks</i>
		Najah Abu Ali (Queen's University, Canada), Hussein Mouftah (University of Ottawa, Canada) and Saeed Gazor (Queen's University, Canada)

1568952716	SW10	<i>Application of Neuron-Based Adaptive Control System to the Operation of Marine Water Pumps</i>
		Xiaoyan Xu and Wanneng Yu (Shanghai Maritime University, P.R. China)
1568953180	SW11	<i>The Role Transition Mechanisms in Role-Based Collaborative Systems</i>
		Haibin Zhu and Pierre Seguin (Nipissing University, Canada)

May 3, Tuesday Morning, 8:00-9:40am

TM11 Courtyard Rm, CDMA and UWB

Chair: T. Le-Ngoc (McGill University, Canada)

1568950724	<i>Capacity and Error Probability of CDMA Systems with Space Time Block Coding over Correlated Fading Channels</i>
	Wei Li, Hao Zhang and T. Aaron Gulliver (University of Victoria, Canada)
1568951397	<i>Chip Waveform Shaping for Band-Limited MC-DS-CDMA</i>
	S. Sureshkumar, E. Shwedyk (University of Manitoba, Canada) and Ha H. Nguyen (University of Saskatchewan, Canada)
1568952564	<i>MMSE-Based Adaptive Multiuser Detection of DS-CDMA Signals</i>
	Mohsen Ghotbi and M. Reza Soleymani (Concordia University, Canada)
1568951486	<i>An Adaptive Rake Receiver for Ultra Wideband Systems</i>
	Quan Wan and Anh Dinh (University of Saskatchewan, Canada)
1568953195	<i>Effects of Multi-User Interference on the Error Rate of DS-UWB Systems</i>
	Bo Hu and Norman C. Beaulieu (University of Alberta, Canada)

May 3, Tuesday Morning, 8:00-9:40am

TM12 Saskatoon Rm, Computer Network and Systems 2

Chair: Ron Bolton (University of Saskatchewan, Canada)

1568953015	<i>Slot Contention Resolution for Distributed TDM Scheduling in an Optical Star Network</i>
	Akbar Ghaffar Pour Rahbar and Oliver Yang (University of Ottawa, Canada)
1568953036	<i>Wavelength Scheduling Algorithms with Delayed Acceptance for Optical Burst Switching Networks</i>
	Ayman Kaheel and Hussein Alnuweiri (University of British Columbia, Canada)
1568953259	<i>An Accurate Model for Fair Rate Calculation in Resilient Packet Rings</i>
	Arash Shokrani, Ioannis Lambadaris and Jérôme Talim (Carleton University, Canada)
1568952744	<i>Development of a VoIP System Implementing a High Quality Packet Loss Concealment Technique</i>
	Naofumi Aoki (Hokkaido University, Japan), Kouhei Takano, Isao Ohmura, Hironari Arai (Hokkaido Industrial Research Institute, Japan) and Tomohiro Namerikawa (NE Systems, Japan)
1568951323	<i>Dynamic Silicon Firewall</i>
	Darrell Laturnas and Ron Bolton (University of Saskatchewan, Canada)

May 3, Tuesday Morning, 8:00-9:40am

TM13 Manitoba Rm, Power Electronics 1

Chair: Ani Gole (University of Manitoba, Canada)

1568952702	<i>Efficient Switching of Three-Phase PFC Converters Based on a Sensorless Current Control Neuro-Computing Space Vector Modulation</i>
	Davood Yazdani (Concordia University, Canada) and Alireza Bakhshai (Queen's University, Canada)
1568953378	<i>Hysteresis-Based Current Control at Fixed Frequency, with a Resonating Integrator to Eliminate the Steady State Error</i>
	Alexis W. Krieger and John C. Salmon (University of Alberta, Canada)
1568952378	<i>STATCOM Model in EMTP RV Using Hysteresis Current Controlled Voltage Source Converter (VSC)</i>
	Yongan Deng, Vijay K. Sood and Luiz A. C. Lopes (Concordia University, Canada)
1568953380	<i>Phase-Locked Loop Synchronization with Gated Control</i>
	Alexis W. Krieger and John C. Salmon (University of Alberta, Canada)
1568952816	<i>Problématique des Théories sur la Puissance Électrique en Régime Déformé</i>
	Benito Midy and Guy Olivier (École Polytechnique de Montréal, Canada)

May 3, Tuesday Morning, 8:00-9:40am

TM14 Wig & Pen Rm, Real Time Embedded Systems

Chair: Andrew Kostiuk (TRLabs, Saskatoon, Canada)

1568951251	<i>Fault-Tolerant Scheduling of Real-Time Tasks Having Software Faults</i>
	Gul N. Khan and Ayman Sydhom (Ryerson University, Canada)
1568950748	<i>An RTPA Supporting Environment for Java Code Generation</i>
	Cyprian F. Ngolah, Yingxu Wang and Xinming Tan (University of Calgary, Canada)
1568953374	<i>Application Modeling Description Language for Reconfigurable Co-Processor Computing</i>
	Peng Fu and Voicu Groza (University of Ottawa, Canada)
1568952896	<i>Real Time 3D Rendering Patch Processing Using an Embedded SIMD Computer Architecture</i>
	Jeff S. Mrochuk and Duncan G. Elliott (University of Alberta, Canada)
1568953321	<i>Programmable Traffic Generator with Configurable Stochastic Distributions</i>
	Ahmad Abdo and Trevor J. Hall (University of Ottawa, Canada)

May 3, Tuesday Morning, 8:00-9:40am

TM15 Brass Lantern Rm, Image Processing 2

Chair: Mohsen Ghazel (University of British Columbia, Canada)

1568953262	<i>Joint Fractal-Wavelet Image Denoising and Interpolation</i> Mohsen Ghazel (University of British Columbia, Canada), Edward R. Vrscay, George H. Freeman (University of Waterloo, Canada), Rabab K. Ward and Rafeef Abugharbieh (University of British Columbia, Canada)
1568953249	<i>Adaptive Image Watermarking Based on a Dynamic Fuzzy Inference System</i> Nizar Sakr, Jiying Zhao and Voicu Groza (University of Ottawa, Canada)
1568953328	<i>A Gabor Based Technique for Image Denoising</i> Nezamoddin Nezamoddini-Kachouie and Paul Fieguth (University of Waterloo, Canada)
1568951693	<i>A Novel Approach for Finding the Movement of an Object in Video Sequences by an Artificial Neural Network for 2.5D Object Modeling</i> Rishabh Malhotra and Kunio Takaya (University of Saskatchewan, Canada)
1568952115	<i>Extraction of Principal Lines and Image Compensation of a Rotation for Non-Contacting Fingerprint Authentication</i> Keita Torii and Noriyoshi Okamoto (Kanto Gakuin University, Japan)

May 3, Tuesday Morning, 10:00-11:40am

TM21 Courtyard Rm, Transceiver Algorithm

Chair: E. Shwedyk (University of Manitoba, Canada)

1568952804	<i>Distributed Encryption and the Slepian-Wolf Theorem</i>
	Isabel Deslauriers (McGill University, Canada)
1568953066	<i>A Decorrelator Based Successive Interference Cancellation Multiuser Multirate Receiver</i>
	Bin Yang and Florence Danilo-Lemoine (Carleton University, Canada)
1568953183	<i>Improved Cascade Stream Ciphers Using Feedback</i>
	Lu Xiao, Stafford Tavares (Queen's University, Canada), Amr Youssef (Concordia University, Canada), Guang Gong (University of Waterloo, Canada)
1568953367	<i>AM-FM Analysis of a Chirp Multicomponent Signal Employing MWL Criterion</i>
	Reza Rashidi Far and Saeed Gazor (Queen's University, Canada)
1568953355	<i>Robust Multiple-Model Channel Tracking and MMSE-DFE Multiuser Detection in DS-CDMA Fading Mobile Channels with Impulsive Noise</i>
	Tan-Jan Ho and Bor-Sen Chen (National Tsing Hua University, Taiwan)

May 3, Tuesday Morning, 10:00-11:40am

TM22 Saskatoon Rm, Digital Signal Processing 3

Chair: Brian Daku (University of Saskatchewan, Canada)

1568950799	<i>A study of designing recursive 2-D digital filter from an analog bridged-T network</i>
	Ashraf Ul Haque and Venkatanarayana Ramachandran (Concordia University, Canada)
1568953179	<i>Angle Estimation with Propagator Method for Correlated Sources under Unknown Symmetric Toeplitz Noise</i>
	Nizar Tayem and Hyuck Kwon (Wichita State University, USA)
1568951511	<i>A Variable Step-Size Affine Projection Algorithm With a Weighted Projection Matrix</i>
	Tao Dai, Behnam Shahrava and Xiang Chen (University of Windsor, Canada)
1568953265	<i>Locating Water Ingress in Telephone Cables using Frequency Domain Reflectometry</i>
	David Dodds and Bernardo Celaya (University of Saskatchewan, Canada)
1568953185	<i>Performance Comparisons of Three Localization Algorithms</i>
	Sha Li and Brian Daku (University of Saskatchewan, Canada)

May 3, Tuesday Morning, 10:00-11:40am

TM23 Manitoba Rm, Power Systems 3

Chair: Sherif Faried (University of Saskatchewan, Canada)

1568952703	<i>A High-Resolution FFT-Based Algorithm for Parameter Estimation of Power System Oscillations</i>
	Davood Yazdani (Concordia University, Canada) and Alireza Bakhshai (Queen's University, Canada)
1568951092	<i>Voltage Stabilization And Reactive Compensation Using A Novel FACTS- STATCOM Scheme</i>
	M. S. El-Moursi and A.M. Sharaf (University of New Brunswick, Canada)
1568951270	<i>Wind Power Simulation Model for Reliability Evaluation</i>
	Rajesh Karki and Po Hu (University of Saskatchewan, Canada)
1568952092	<i>Dynamic Simulator for Thyristor Controlled Series Compensator</i>
	Kejun Li, Jianguo Zhao, Wilsun Xu and Xiaoling Jin (Shandong Univerisity, P.R. China)
1568951326	<i>A Special Protection Scheme for Voltage Instability Prevention</i>
	Tara Alzahawi, Mohindar S. Sachdev and G. Ramakrishna (University of Saskatchewan, Canada)

May 3, Tuesday Morning, 10:00-11:40am

TM24 Wig & Pen Rm, Control Theory and Applications 1

Chair: Mehran Mehrandezh (University of Regina, Canada)

1568952806	<i>A Simple and Fast Method for Designing a Decentralized LQ Controller for an Aircraft Based on DFP Algorithm</i>
	S.M. Azizi, M. Zamani Fekri and D. Yazdani (Concordia University, Canada)
1568953301	<i>Performance of Variable Step-Size LMS Algorithms for Linear Adaptive Inverse Control Systems</i>
	Tiebao Yang and Behnam Shahrrava (University of Windsor, Canada)
1568952989	<i>Adaptive Vector Control for Slip Energy Recovery in Doubly-Fed Wind Driven Induction Generator</i>
	Hany M. Jabr and Narayan C. Kar (University of Windsor, Canada)
1568952098	<i>Examination of Controller Performance and Robustness versus Control Effort: Experimental Control of DC Motor Position</i>
	C. N. Regier and J. K. Pieper (University of Calgary, Canada)
1568953017	<i>Control of a One-Legged Hopping Robot Using an Inverse Dynamic-based PID Controller</i>
	Kuldip Gopal Naik and Mehran Mehrandezh (University of Regina, Canada)

May 3, Tuesday Morning, 10:00-11:40am

TM25 Brass Lantern Rm, Agent-Based and Internet-Based Systems 1

Chair: Raman Paranjape (University of Regina, Canada)

1568953057	<i>Building Collaborative Intelligent Agents: Revealing Main Pillars</i>
	Nora Houari and Behrouz Homayoun Far (University of Calgary, Canada)
1568952870	<i>Mathematical Analysis of Agent Swarm Behavior in an Agent-Based Electronic Health Record System</i>
	B. Tse, R. Paranjape and L. Benedicenti (University of Regina, Canada)
1568952678	<i>Performance of Weighted Fair Queuing Systems with Long Range Dependent Traffic Inputs</i>
	Mohamed Ashour and Tho Le-Ngoc (McGill University, Canada)
1568953027	<i>Investigation of Ant Colony Algorithm in Multiple Traffic Flow Environments</i>
	Ali Tizghadam, Masoud Hashemi and Alberto Leon-Garcia (University of Toronto, Canada)
1568953205	<i>Grid Resource Discovery using Small World Overlay Graphs</i>
	Kashif Ali, Suprakash Datta and Mokhtar Aboelaze (York University, Canada)

May 3, Tuesday Morning, 8:30-11:30am

Poster Session 2, Saskatchewan C, Communication

Chair: Aryan Saadat Mehr (University of Saskatchewan, Canada)

1568950915	C1	<i>The Effect of Antenna Physics on Fading Correlation and the Capacity of Multielement Antenna Systems</i>
		J. Gong, J. F. Hayes and M. R. Soleymani (Concordia University, Canada)
1568952996	C2	<i>Indoor Location Using Received Signal Strength of IEEE 802.11b Access Point</i>
		Gilles Ibrahim Wassi, Dominic Grenier (Université Laval, Canada), Charles Despins (Prompt-Québec, Canada) and Chahé Nerguizian (École Polytechnique de Montréal, Canada)
1568953199	C3	<i>Parallel and Successive Interference Cancellation Receivers in a Layered MIMO Scheme</i>
		Adel Omar Dahmane (Université du Québec à Trois-Rivières, Canada)
1568953207	C4	<i>A Space-Frequency-Time Diversity Scheme for MIMO-OFDM Systems</i>
		Simon Savary, Huu Tuê Huynh, Jean-Yves Chouinard and Sébastien Roy (Université Laval, Canada)
1568953291	C5	<i>Cross-Layer Design for MIMO Nakagami Fading Channels in the Presence of Gaussian Channel Estimation Errors</i>
		Amine Maaref and Sonia Aïssa (Université du Québec à Montréal, Canada)
1568948744	C6	<i>Design and Implementation of Efficient FFT Processor for Multicarrier System</i>
		Zheng Wang, Mingke Dong and Yuping Zhao (Peking University, P.R. China)
1568952821	C7	<i>OFDM-CPM for MIMO Wireless Communication: Signal Detection and Performance</i>
		Richard I. Clara and Raveendra K. Rao (University of Western Ontario, Canada)
1568953192	C8	<i>Frequency-Time Codes for OFDMA Uplink Applications</i>
		Frédéric Mathieu and Jean-Yves Chouinard (Université Laval, Canada)

1568951460	C9	<i>A Queueing Model of an Adaptive Type-I Hybrid-ARQ with a Generalized Markovian Source and Channel</i>
		Jun-Bae Seo, Seung-Que Lee, Nam-Hoon Park (Electronics and Telecommunication Research Institute, Republic of Korea), Hyong-Woo Lee and Choong-Ho Cho (Korea University, Republic of Korea)
1568951474	C10	<i>An Extension to DCF for Wireless Local Area Networks</i>
		Liang Zhang, Yantai Shu, Lianfang Zhang (Tianjin University, P.R. China) and Oliver W.W. Yang (University of Ottawa, Canada)
1568951263	C11	<i>Mobile-IPv6 MPLS OAM Requirements</i>
		Sasan Adibi and Shervin Erfani (University of Windsor, Canada)
1568953000	C12	<i>IP-Based IMT Network Platform for Mobile-IPv6-MPLS Systems</i>
		Sasan Adibi and Shervin Erfani (University of Windsor, Canada)
1568952279	C13	<i>Prediction-Based Advanced Resource Reservation in Mobile Environments</i>
		Nancy Samaan (University of Ottawa, Canada), Badr Benmammar, Francine Krief (Université Paris 13, France) and Ahmed Karmouch (University of Ottawa, Canada)
1568952810	C14	<i>The Study of Wireless Local Area Networks and Wireless Personal Area Networks</i>
		Jun Li, Amitava Bose and Yiqiang Q. Zhao (Carleton University, Canada)
1568953305	C15	<i>A Monitoring System for Mitigating Fast Propagating Worms in the Network Infrastructure</i>
		Miguel Vargas Martin (University of Ontario, Canada)
1568954681	C16	<i>Utilizing DiffServ and SIP Contact Header for Real-Time Fax Traffic Engineering</i>
		Masood Khosroshahy, Bahman Abolhassani (Iran University of Science and Technology, Iran) and David E. Dodds (University of Saskatchewan, Canada)
1568952674	C17	<i>Conception et Implémentation d'une Plate-Forme de Services de Localisation</i>
		Ronald Beaubrun and Karim Chaari (Université Laval, Canada)

1568953288	C18	<i>Radar Cross-Section of Conducting Targets in Random Media for Circular Polarization</i>
		Hosam El-Ocla (Lakehead University, Canada)

May 3, Tuesday Morning, 8:30-11:30am

Poster Session 2, Saskatchewan C, Signal Processing

1568953273	SP1	<i>Rotation Sensitivity of Independent Component Analysis to Outliers</i>
		N. Gadhok and W. Kinsner (University of Manitoba, Canada)
1568953529	SP2	<i>Generation of Regular Logic Cell Structures for Coding in Real-Time Optical CDMA Network</i>
		Martin Irman and Jan Bajcsy (McGill University, Canada)
1568952484	SP3	<i>Development of a Fuel Cell Simulator Based on an Experimentally Derived Model</i>
		Martin Ordonez, M. Tariq Iqbal and John E. Quaicoe (Memorial University of Newfoundland, Canada)
1568953272	SP4	<i>A Quantitative Comparison of Different Mother Wavelets for Characterizing Transients in Power Systems</i>
		L. S. Safavian, W. Kinsner and H. Turanli (University of Manitoba, Canada)
1568952057	SP5	<i>The Single Event Effects Performance of Low Power Embedded Fixed Point Digital Signal Processors and Microprocessor</i>
		David M. Hiemstra, David Deschenes and Darren Hill (MD Robotics, Canada)
1568952495	SP6	<i>Speaker Verification Using a New Representation Based on a Combination of MFCC and Formants</i>
		Ahmed Mezghani (Laboratoire d'Électronique et des Technologies de l'Information, Tunisia) and Douglas O'Shaughnessy (Université du Québec, Canada)
1568950805	SP7	<i>A Remote Telepresence System for High School Classrooms</i>
		Jason Yeung and Deborah I. Fels (Ryerson University, Canada)
1568953056	SP8	<i>A Distributed Arithmetic Hardware Architecture for Real-Time Hough Transform Based Segmentation</i>
		Karthik Mayasandra, Hanif M. Ladak and Wei Wang (University of Western Ontario, Canada)

May 3, Tuesday Morning, 8:30-11:30am

Poster Session 2, Saskatchewan C, Power Systems

1568953223	P1	<i>Study of The Apparent Load Loss Unbalance in Three-Phase Transformers</i>
		Patrick Picher, Léonard Bolduc, Richard Gagnon and Gilbert Sybille (Institut de recherche d'Hydro-Québec, Canada)
1568951487	P2	<i>Modeling of an Islanding Protection Method for a Hybrid Renewable Distributed Generator</i>
		Mylène Robitaille, Kodjo Agbossou and Mamadou Lamine Doumbia (Université du Québec à Trois-Rivières, Canada)
1568951449	P3	<i>Two Studies on Grid Expansion Planning</i>
		Trungtin Tran, Jaeseok Choi (Gyeongsang National University, Republic of Korea) and Abdurrahim El-Keib (University of Alabama, USA)
1568951254	P4	<i>Out-Of-Step Protection Using the Equal Area Criterion</i>
		Shengli Cheng and Mohindar S. Sachdev (University of Saskatchewan, Canada)
1568952651	P5	<i>UHV for Iranian Power Grid, Will it be a Reality?</i>
		Sied Hadi Hosseini, Hossein Seifi, Hosein Haghighat (Iran Power System Engineering Research Centre (IPSERC), Iran), Sadegh Sepasian (Power and Water Institute of Technology, Iran), Asghar Akbari (IPSERC, Iran) and Saed Raei (Tavanir, Iran)
1568950709	P6	<i>A Cost Effective Magnetic Design for a 900 kHz High Frequency Voltage Regulator Module: Analysis and Experimentation</i>
		Mohamed Z. Youssef and Praveen K. Jain (Queen's University, Canada)
1568953345	P7	<i>Evaluating The Basilar Membrane Displacement For Speech Stimuli: A computational Algorithm</i>
		Ladan Golipour and Saeed Gazor (Queen's University, Canada)
1568949390	P8	<i>Modelling of Three-Phase Uniform Symmetrical Sampling Digital PWM for Power Converter</i>
		Saad Mekhilef (University of Malaya, Malaysia), A. M. Omar (Mara University of Technology) and N. A. Rahim (University of Malaya, Malaysia)
1568952676	P9	<i>Permanent Magnet DC Linear Machine Model for Real Time Simulation</i>
		Remigius Okonkwo (University of Manitoba, Canada)

May 3, Tuesday Morning, 8:30-11:30am

Poster Session 2, Saskatchewan C, Electronics

1568951262	E1	<i>MEMS Mechanical Logic Units: Design and Fabrication with Micragem and Polymumps</i>
		Sae-Won Lee, Robert Johnstone and Ash M. Parameswaran (Simon Fraser University, Canada)
1568951339	E2	<i>Fuse-Tethers In MEMS: Theory and Operation</i>
		Yu-Shan Chiu, Kwan-Shi Chang, Robert W. Johnstone and M. Parameswaran (Simon Fraser University, Canada)
1568953361	E3	<i>Metastability Analysis of CMOS Current Mode Logic Latches</i>
		Muhammad Usama and Tad A. Kwasniewski (Carleton University, Canada)
1568951363	E4	<i>On Mitigating Power and Delay in VLSI Interconnects</i>
		Rajeevan Chandel, S. Sarkar and R.P. Agarwal (Indian Institute of Technology, India)
1568952037	E5	<i>A versatile Component Integration Tool for Rapid Prototyping in Programmable Logic</i>
		Mohanarajah Sinnathamby and Naraig Manjikian (Queen's University, Canada)
1568953247	E6	<i>HDL2GDS: A Fully Automated ASIC Digital Design Flow</i>
		Tyler L. Brandon, Bruce F. Cockburn and Duncan G. Elliott (University of Alberta, Canada)
1568950068	E7	<i>An Unifying Theory and Characterization of Microwave Oscillator/VCO</i>
		Ulrich L. Rohde, Ajay K. Poddar and Juergen Schoepf (Synergy Microwave Corporation, USA)
1568951391	E8	<i>Design of a Microwave Channelized Active Filter for MMIC</i>
		Eric Thibodeau and François Boone (Université de Sherbrooke, Canada)
1568952871	E9	<i>Modeling Si-Ge Interdiffusion by a Vacancy Exchange Mechanism</i>
		Mohammad Hasanuzzaman and Yaser M. Haddara (McMaster University, Canada)
1568951328	E10	<i>Photoinduced Dichroism in Thin Films of Amorphous As₂Se₃</i>
		Dan DeForrest, Robert E. Johanson and Safa O. Kasap (University of Saskatchewan, Canada)

1568953043	E11	<i>Characterization and Modeling of Accumulation-Mode MOS Varactors</i>
		Pedram Sameni (University of British Columbia, Canada), Chris Siu (PMC-Sierra, Canada), Krzysztof Iniewski (University of Alberta, Canada), Shahriar Mirabbasi (University of British Columbia, Canada), Hormoz Djahanshahi (PMC-Sierra, Canada), Marwa Hamour (University of British Columbia, Canada) and Jatinder Chana (PMC-Sierra, Canada)
1568953333	E12	<i>A 900MHz-2GHz low-swing low-power 0.18μm CMOS PLL</i>
		Neda Nouri and Shahriar Mirabbasi (University of British Columbia, Canada)

May 3, Tuesday Morning, 8:30-11:30am

Poster Session 2, Saskatchewan C, Software

1568950058	SW1	<i>An Intelligent Shopping System Based on Multi-Agent Collaborative Working Model</i>
		Zeng Zi-ming and Meng Bo (Wuhan University, P.R. China)
1568951192	SW2	<i>A Framework for Testing Distributed Software Components</i>
		Yizheng Yao and Yingxu Wang (University of Calgary, Canada)
1568951264	SW3	<i>Utilizing Incomplete Block Designs in Evaluating Agent-Oriented Software Engineering Methodologies</i>
		A. Halim Elamy and Behrouz H. Far (University of Calgary, Canada)
1568951668	SW4	<i>Tree Ring Analysis</i>
		Hayet Laggoune (Université du Québec à Montreal, Canada), Sarifuddin and Vincent Guesdon (Université du Québec en Outaouais, Canada)
1568953006	SW5	<i>Multipath Mitigation of GNSS Carrier Phase Signals for an Onboard Unit for Mobility Pricing</i>
		Ronesh Puri, Ahmed El Kaffas, Alagan Anpalagan, Sri Krishnan (Ryerson University, Canada) and Bern Grush (Applied Location Corp., Canada)
1568953289	SW6	<i>Towards Flexible Distributed Real-Time Monitoring and Managing of Workflows</i>
		André Baumgart (University of Mannheim, Germany)
1568948673	SW7	<i>Emergent Models of Wellness: A Case Study of Management Practices in Single Resident Occupant Hotels of Vancouver CA</i>
		Mark D. Alexiuk (University of Manitoba, Canada), Gordon K. Wiebe (Community Builders, Canada) and Nick J. Pizzi (University of Manitoba, Canada)
1568954853	SW8	<i>Neural Network Methods for the Localization and Navigation of Mobile Robots</i>
		Zeng-Guang Hou (Institute of Automation, Chinese Academy of Sciences, P.R. China) and Madan Gupta (University of Saskatchewan, Canada)
1568953162	SW9	<i>Omni-stereo vision system for an autonomous robot using neural networks</i>
		Yasamin Mokri and Mansour Jamzad (Sharif University of Technology, Iran)

May 3, Tuesday Afternoon, 1:40-3:00pm

TA11 Courtyard Rm, OFDM and MIMO Systems

Chair: David Dodds (University of Saskatchewan, Canada)

1568952513	<i>Circulant Wired MIMO Structures</i>
	S. Amir Mirtaheri and Rodney Vaughan (Simon Fraser University, Canada)
1568953045	<i>New Methods to Reduce Intercarrier Interference in OFDM Systems</i>
	Dung Ngoc Dao and Chintha Tellambura (University of Alberta, Canada)
1568953069	<i>Multirate Zero-Forcing Tx-Rx Design for MIMO Channel under BER Constraints</i>
	A. Yasotharan (Radarcom Signals, Canada)
1568952677	<i>Total Power Constraint Equality in Integer Bit Loading Algorithms for Multicarrier Systems</i>
	Saswat Panigrahi and Tho Le-Ngoc (McGill University, Canada)

May 3, Tuesday Afternoon, 1:20-3:00pm

TA12 Saskatoon Rm, Electronic Materials and Devices

Chair: Stephen O'Leary (University of Regina, Canada)

1568952781	<i>Semiconductor compound alloys related to InN and their application in design of semiconductor lasers</i>
	Dimiter Alexandrov (Lakehead University, Canada)
1568953062	<i>Low Loss Inductors built-on PECVD Intrinsic Amorphous Silicon for RF Integrated Circuits</i>
	Stella Chang and Siva Sivothythaman (University of Waterloo, Canada)
1568953280	<i>Modeling Boron Diffusion in Si, SiGe, and SiGeC</i>
	Samer Rizk and Yaser M. Haddara (McMaster University, Canada)
1568951853	<i>Electronic Transport in Random Media: Examples for nanocrystalline and amorphous silicon films</i>
	K. Shimakawa (Gifu University, Japan)
1568952556	<i>Room Temperature Conduction Characteristics Of Calix [4] Acid/Amine Alternate Layer Langmuir-Blodgett Films</i>
	R. Çapan (Balıkesir University, Turkey), A.K. Ray (Queen Mary College, University of London, UK), A.K. Hassan (Sheffield Hallam University, UK) and F. Davis (Cranfield University at Silsoe, UK)

May 3, Tuesday Afternoon, 1:20-3:00pm

TA13 Manitoba Rm, Power Systems 4

Chair: Wilsun Xu (University of Alberta, Canada)

1568950710	<i>A Symmetrical Component Based Method for Fault Analysis of Double-Circuit Lines</i>
	Qing Chen, Wilsun Xu (Shandong Univerisity, P.R. China) and Xiaoyu Wang (University of Alberta, Canada)
1568952959	<i>Signal phase-shifting during synchrophasor measurements</i>
	E. Demeter (SaskPower, Canada), S.O. Faried (University of Saskatchewan, Canada) and T.S. Sidhu (University of Western Ontario, Canada)
1568953230	<i>Determination of Loss Factors in a Deregulated System</i>
	Ashikur Bhuiya (Alberta Electric System Operator, Canada), N. Chowdhury (University of Saskatchewan, Canada)
1568951113	<i>Modeling Relays for Use in Power System Protection Studies</i>
	S. G. Aquiles Pérez, M. S. Sachdev (University of Saskatchewan, Canada) and T.S. Sidhu (University of Western Ontario, Canada)
1568952831	<i>A New Total Frequency Deviation Algorithm for Anti-Islanding Protection in Inverter-Based DG Systems</i>
	Jun Yin, Liuchen Chang and Chris Diduch (University of New Brunswick, Canada)

May 3, Tuesday Afternoon, 1:20-3:00pm

TA14 Wig & Pen Rm, Control Theory and Applications 2

Chair: Gordon H. Huang (University of Regina, Canada)

1568953276	<i>Efficiency-Minimization Loss based Fuzzy Logic Control of Induction Machine</i>
	A.H. Haddoun (Centre Universitaire Larbi Ben M'Hidi Oum El-Bouaghi, Algeria), J. Ghouili (Université de Moncton, Canada), R. Abdessemed (Université de Batna, Algeria) and K. Srairi (Université de Biskra, Algeria)
1568951371	<i>Modeling and Control of a Small Wind Turbine</i>
	Md. Arifujjaman, M. Tariq Iqbal, John E. Quaicoe and M. Jahangir Khan (Memorial University of Newfoundland, Canada)
1568952596	<i>Identification of complex systems in the basis of wavelets</i>
	Alexander Shaydurov (University McGill, Canada)
1568952525	<i>Multi-objective Optimization for the Process Control of the In-Situ Bioremediation System</i>
	Zhiying Hu, Christine W. Chan and Gordon H. Huang (University of Regina, Canada)
1568953309	<i>Optimal Networked Control System Design: A Dual-rate Approach</i>
	Amir K. Dehghani (Queen's University, Canada)

May 3, Tuesday Afternoon, 1:20-3:00pm

TA15 Brass Lantern Rm, Agent-Based and Internet-Based Systems 2

Chair: Raman Paranjape (University of Regina, Canada)

1568953275	<i>Effects of Lying in Reputation Based Multi-Agent Systems</i> Marek Laskowski and Sara McGrath (University of Manitoba, Canada)
1568952076	<i>A Service Discovery Model for Computational Grids</i> Youcef M. Derbal (Ryerson University, Canada)
1568953278	<i>Scalability Analysis of Multi-Tier Distributed Software Patterns Using Layered Queuing Networks</i> Umar Farooq (Carleton University, Canada) and Kashif I. Siddiqui (University of Michigan, USA)
1568951376	<i>Performance analysis of IMAGO system</i> Yonghao Su and Xining Li (University of Guelph, Canada)
1568951327	<i>Intelligent Software Measurement System (ISMS)</i> Junling Huang and Behrouz Homayoun Far (University of Calgary, Canada)

May 3, Tuesday Afternoon, 3:30-5:30pm

TA21 Courtyard Rm, Modulation and Coding

Chair: Ha H. Nguyen (University of Saskatchewan, Canada)

1568951396	<i>Multi-Dimensional Mappings of M-Ary Constellations for BICM-ID Systems</i>
	Nghi H. Tran and Ha H. Nguyen (University of Saskatchewan, Canada)
1568952439	<i>Improved Nyquist Pulses for Digital Data Transmission</i>
	Ali Grami (University of Ontario Institute of Technology, Canada)
1568952682	<i>Enhanced Multiuser Resource Allocation Using Near-Continuous Loading Algorithms with Adaptive Coding for Digital Subscriber Loops</i>
	Saswat Panigrahi, Yang Xu and Tho Le-Ngoc (McGill University, Canada)
1568953300	<i>An HMM Approach to Adaptive Modulation and Coding with Multicodes for Fading Channels</i>
	Raymond Kwan and Cyril Leung (University of British Columbia, Canada)
1568953370	<i>Likelihood Ratio Tests for PSK Modulation Classification in Unknown Noise Environment</i>
	A.A. Tadaion and M. Derakhtian (Sharif University, Tehran, Iran), S. Gazor (Queen's University, Canada) and M.R. Aref (Sharif University, Iran)
1568953047	<i>Uplink Multiuser MIMO-OFDM in Widely Spaced Antenna Arrays</i>
	Nadem. H.Dawod, Roshdy. Hafez and Ian Marsland (Carleton University, Canada)

May 3, Tuesday Afternoon, 3:30-5:30pm

TA22 Saskatoon Rm, Biomedical Engineering 1

Chair: Robert E. Gander (University of Saskatchewan, Canada)

1568951374	<i>Exploring the Non-linear Dynamics of the EEG Signals</i> Wassila Hamadene, Laurent Peyrodie (Hautes Études d'Ingénieurs, France) and Christian Vasseur (Université des Sciences et Technologies de Lille, France)
1568952379	<i>Identification of Time-varying Joint Dynamics</i> Sreemoyi Sanyal, David T. Westwick (University of Calgary, Canada)
1568951621	<i>Hardware-assisted Lossless ECG Coding</i> Adam Ottley and Ron Bolton (University of Saskatchewan, Canada)
1568953163	<i>On Stochastic Representation of Residual Time Series from Observed Respiratory Movements</i> Alexis L. Motto and Henrietta L. Galiana (McGill University, Canada), Karen A. Brown (Montreal Children's Hospital) and Robert E. Kearney (McGill University, Canada)
1568953235	<i>Photon Counting Pixels in CMOS Technology for Medical X-Ray Imaging Applications</i> Amir H. Goldan and Karim S. Karim (Simon Fraser University, Canada) and John A. Rowlands (University of Toronto, Canada)
1568951471	<i>Using the Local Mode for Edge Detection in Ultrasound Images</i> Tyna Hope, Norma Linney and Peter Gregson (Dalhousie University, Canada)

May 3, Tuesday Afternoon, 3:30-5:30pm

TA23 Manitoba Rm, Power Electronics 2

Chair: Nurul Chowdhury (University of Saskatchewan)

1568953060	<i>The use of pseudo-random binary sequences to predict a dc-dc converter's control-to-output transfer function in continuous conduction mode</i>
	Marcel Allain and Philippe Viarouge (Laval University, Canada) and Faouzi Tourkhani (EMS Technologies, Canada)
1568952803	<i>Étude Comparative des Performances de la Modulation Sinusoïdale Régulière et la Modulation Vectorielle d'un Onduleur à MLI.</i>
	Mohamed Khafallah, A. Elafia and A. Saad (École Nationale Supérieure d'Électricité et de Mécanique, Morocco) and J. Ghouili (Université de Moncton, Canada)
1568951322	<i>Utility Interactive Fuel Cell Inverter for Distributed Generation: Design Considerations and Experimental Results</i>
	M. J. Khan, M. T. Iqbal and J. E. Quaicoe (Memorial University of Newfoundland, Canada)
1568952869	<i>Harmonic Current Reduction for a PWM Rectifier with Very Low Carrier Ratio in a Microturbine System</i>
	Kai Zhang and Liuchen Chang (University of New Brunswick, Canada)
1568952735	<i>PWM AC/DC Boost Converter System for Induction Generators in Variable-Speed Wind Turbines</i>
	Zitao Wang and Liuchen Chang (University of New Brunswick, Canada)
1568952971	<i>Universal Input Voltage, Unity Power Factor, High Efficiency Flyback Rectifier with Regenerative Snubber</i>
	Pascal Fleury and Kamal Al-Haddad (École de Technologie Supérieure, Canada)

May 3, Tuesday Afternoon, 3:30-5:30pm

TA24 Wig & Pen Rm, Advanced Computer Architecture

Chair: Seok-Bum Ko (University of Saskatchewan, Canada)

1568951763	<i>A Reconfigurable, Fully Scalable Integer Wavelet Transform Unit for JPEG2000</i>
	R. Zewail, P. Marshall, S. Kozicki, N. Ying, D. Elliott and N. Durdle (University of Alberta, Canada)
1568952884	<i>Rapidly Prototyping DSP Extensions Using CoDeL: The DWT Using Lifting</i>
	Nainesh Agarwal and Nikitas Dimopoulos (University of Victoria, Canada)
1568953519	<i>A Parameterizable SIMD Stream Processor</i>
	Asad Munshi, Andrew Clinton, Sherman Braganza, William Bishop and Michael McCool (University of Waterloo, Canada)
1568953357	<i>Hardware Support of JPEG</i>
	Mohammed Elbadri, Raymond Peterkin, Voicu Groza, Dan Ionescu and Abdulmotaleb El Saddik (University of Ottawa, Canada)
1568951523	<i>A New Logic Synthesis, ExorBDS</i>
	Kelsey Muma and Seok-Bum Ko (University of Saskatchewan, Canada)
1568952752	<i>Reliability of Protecting Techniques Used in Fault-Tolerant Cache Memories</i>
	Seyed Ghassem Miremadi and Hamid R. Zarandi (Sharif University, Iran)

May 3, Tuesday Afternoon, 3:30-5:30pm

TA25 Brass Lantern Rm, Neural Networks and Fuzzy Logic

Chair: Christine Chan (University of Regina, Canada)

1568952857	<i>LOGO Overcome Combinational Logic Limitations</i> Ali Massoud Haidar and Abdullah S. Abul Hoda (Beirut Arab University, Lebanon), Mostapha Hamad (Notre Dame University-Louaize, Lebanon) and Hiroyuki Shirahama (Ehime University, Japan)
1568953193	<i>Navigation of an Outdoor Robot using a Fuzzy Logic Controller</i> Edvin Hjortland, Kjetil Nyberg, Jeffery V. Salisbury, Li Chen, Abul R. Hasan and Edvin Hjortland (South Dakota School of Mines and Technology, USA)
1568952898	<i>Power Losses on Distribution Network: Estimation Using Simulated Annealing</i> B. A. de Souza, A. A. Sousa and J. M. C. de Albuquerque (Federal University of Campina Grande, Brazil)
1568952986	<i>A Fuzzy Logic Controller for an Oil Separation Process</i> Renfei Liao, Christine W. Chan and Gordon G. Huang (University of Regina, Canada)
1568953234	<i>A Strategy for Mutation Testing Using Genetic Algorithms</i> Md. Mehedi Masud and Amiya Nayak (University of Ottawa, Canada), Marzia Zaman and Nita Bansal (Cistel Technology Inc. Canada)
1568950726	<i>Formal Description of the ADT Model of B-Trees</i> Xinming Tan, Yingxu Wang and Cyprian F. Ngolah (University of Calgary, Canada)

May 3, Tuesday Afternoon, 1:30-4:30pm

Poster Session 3, Saskatchewan C, Communication

Chair: Ron J. Palmer (University of Regina, Canada)

1568951381	C1	<i>A doubletalk detector for critically sampled subband adaptive echo cancellers</i>
		James Gordy and Rafik Goubran (Carleton University, Canada)
1568952783	C2	<i>Optimal Spectrum Management With Group Power Constraint For Digital Subscriber Loops</i>
		Yang Xu, Saswat Panigrahi and Tho Le-Ngoc (McGill University, Canada)
1568953040	C3	<i>Symbol-by-Symbol MAP Detection of Differential Frequency Hopping Signals over Rayleigh Flat Fading Channels</i>
		Rui Zhang and Kaihua Liu (Tianjin University, P.R. China)
1568953353	C4	<i>Radiowave PPM Blind Spatial-Rake Receiver & Co-Channel Interference Suppression</i>
		Kainam Thomas Wong (University of Waterloo, Canada)
1568953033	C5	<i>Joint Source-Channel Decoding of Multiple Descriptions</i>
		Upul Samarawickrama and Pradeepa Yahampath (University of Manitoba, Canada)
1568953189	C6	<i>H.264 Compliant Stereoscopic Video CODEC</i>
		A.B.B. Adikari, W.A.C. Fernando, H. Kodikara Arachchi and K.K. Loo (Brunel University, United Kingdom)
1568953385	C7	<i>An Iterative M-Algorithm Convolutional Decoding Algorithm</i>
		Seyed Ali Gorji Zadeh and M. Reza Soleymani (Concordia University, Canada)
1568953295	C8	<i>Novel DLC Model for VBR QoS Enhancement in Wireless ATM Networks</i>
		Abdunnaser A. Diaf and Hosam El-Ocla (Lakehead University, Canada)

1568953364	C9	<i>Scalability and Performance Analysis of IEEE 802.11a</i>
		Abu Nasser M. Abdullah, Haja Moinudeen (Concordia University, Canada), Wajdi Al-Khateeb (International Islamic University, Malaysia)
1568951603	C10	<i>Addressing the GRWA Problem in WDM Networks with a Tabu Search Algorithm</i>
		Alain C. Houle (Université de Sherbrooke, Canada), Brigitte Jaumard and Yannick Solari (Université de Montreal, Canada)
1568952635	C11	<i>New Developments in Cable TV Networks - Data over Cable Services and PacketCable</i>
		Christopher Pawlowski (Rogers Communications Inc, Canada) and Shaowen Song (Wilfrid Laurier University, Canada)
1568953224	C12	<i>Quality of Service for Digital Video Broadcasting</i>
		Suresh Voora, Ken Ferens and Attahiru S. Alfa (University of Manitoba, Canada)

May 3, Tuesday Afternoon, 1:30-4:30pm

Poster Session 3, Saskatchewan C, Signal Processing

1568952985	SP1	<i>IP Address Lookup Using A Dynamic Hash Function</i> Xiaojun Nie (Carleton University, Canada), David J. Wilson, Jerome Cornet, Gerard Damm (Alcatel, USA) and Yiqiang Zhao (Carleton University, Canada)
1568951411	SP2	<i>An Efficient and Reconfigurable Architecture for RC5</i> Hua Li, Jianzhou Li and Jing Yang (University of Lethbridge, Canada)
1568953165	SP3	<i>Link Dimensioning in WDM Networks with Dynamic Traffic Grooming</i> K. Mosharaf, I. Lambadaris, J. Talim and A. Shokrani (Carleton University, Canada)
1568948967	SP4	<i>Formal methods impact on ANSI standard HL7/IM -- filling gaps in MSC theory</i> Wieger Wesselink, Nicolae Goga, Arjan Mooij (Technische Universiteit Eindhoven, The Netherlands) and Rene Spronk (Ringholm GmbH Integration Consulting, Germany)
1568953009	SP5	<i>Explicit Feedback Notification for Transporting Multimedia Streaming Flows over the Internet</i> Stenio F.L. Fernandes, Djamel F.H. Sadok (Federal University of Pernambuco, Brazil) and Ahmed Karmouch (University of Ottawa, Canada)
1568953283	SP6	<i>Surrogate ECG Signals for the Null-Hypothesis Analysis of Heart Monitoring</i> M. Potter and W. Kinsner (University of Manitoba, Canada)
1568952901	SP7	<i>Investigating Schizophrenia Using Local Connectivity Considerations within the Piriform Cortex</i> Dragos Calitoiu, Doron Nussbaum and B. John Oommen (Carleton University, Canada)

1568952883	SP8	<i>Segmentation and Classification of Heart Sounds</i>
		Cota Navin Gupta (Nanyang Technological University, Singapore), Ramaswamy Palaniappan (University of Essex, United Kingdom), Sreeraman Rajan (Defence R&D, Canada), Sundaram Swaminathan and S.M.Krishnan (Nanyang Technological University, Singapore)
1568951359	SP9	<i>Ultrasonographic Classification of Cirrhosis Based on Pyramid Neural Network</i>
		Yan Sun, Jianming Lu and Takashi Yahagi (Chiba University, Japan)
1568953137	SP10	<i>M-Cliques: Modified Cliques Key Agreement for Secure Multicast</i>
		Xiaoyan Chen, Bobby N.W. Ma and Cungang Yang (Ryerson University, Canada)
1568953159	SP11	<i>Rate-Based Congestion Control for Tree-Based Reliable Multicast</i>
		Van Ngo and Uyen Trang Nguyen (York University, Canada)
1568951656	SP12	<i>Secure Multicast Communication: End User Identification and Accounting</i>
		Nargis Sultana and J. William Atwood (Concordia University, Canada)
1568951246	SP13	<i>Sharing in Distributed Environments: The Mutual Exclusion Problem-The Moving Ant Model</i>
		Vignesh Kumar Munirajan, Eric Cole and Sandy Ring (The Sytex Group Inc, USA)
1568951305	SP14	<i>A New Post Distorter of WLAN Amplifiers Using Hammerstein Filter</i>
		Yasin Miar, Mojtaba Vaezi and Amirreza Momen (Islamic Azad University, Iran)
1568953052	SP15	<i>Fixed-Point IIR Digital Filters with Simultaneous Hardware Usage, Group Delay and Magnitude Frequency Response Specifications</i>
		Trevor W. Fox (Intelligent Engines, Canada)

May 3, Tuesday Afternoon, 1:30-4:30pm

Poster Session 3, Saskatchewan C, Power Systems

1568951147	P1	<i>Relationship between Shunt Capacitor and Small Signal Stability of Power Systems</i>
		Hongjie Jia, Xiaodan Yu, Xiaoyan Sun, Jianhua Chen, Wei Wang and Yixin Yu (Tianjin University, P.R. China)
1568952692	P2	<i>Effect of Test Source Parameters on Flashover Voltage of Polymer Insulators in Clean Fog Test</i>
		Hossein Mohseni, Majid Sanaye-Pasand (University of Tehran, Iran), Ali Naderian and Shesha Jayaram (University of Waterloo, Canada)
1568953534	P3	<i>Reliability Assessment of Composite Power Systems</i>
		Sreten Skuletic (University of Montenegro, Serbia and Montenegro) and Adis Balota (Republic Fund of Health Insurance, Serbia and Montenegro)
1568951027	P4	<i>Optimal Sizing of Standalone Hybrid Wind/PV Power Systems Using Genetic Algorithms</i>
		Daming Xu, Longyun Kang (Xi'an Jiaotong University, P.R. China), Liuchen Chang (University of New Brunswick, Canada), Binggang Cao (Xi'an Jiaotong University, P.R. China)

May 3, Tuesday Afternoon, 1:30-4:30pm

Poster Session 3, Saskatchewan C, Electronics

1568953362	E1	<i>Adaptive Weight Generation</i> Helmut Jurgensen and Amit Kumar (University of Western Ontario, Canada)
1568953065	E2	<i>Low Power n-bit Adders and Multiplier using Lowest-number-of-Transistor 1-bit Adders</i> Fartash Vasefi and Z. Abid (University of Western Ontario, Canada)
1568952836	E3	<i>An on-chip Low Power Clock Multiplier unit in 0.25 μm technology</i> Meer Tanvir Hossain Setu, Gorinta Rama Krishnam Raju and Roshan Weerasekera (Royal Institute of Technology (KTH), Sweden)
1568953070	E4	<i>New Designs of 14-Transistor PPM Adder</i> Rizwan Mudassir, H. El-Razouk, Z. Abid and Wei Wang (University of Western Ontario, Canada)
1568952942	E5	<i>Implémentation matérielle d'un décodeur conceptuel pour l'analyse vidéo MPEG-2 temps réel</i> Michael Janiaut, Camel Tanougast, Hassan Rabah, Yves Berviller, Christian Mannino et Serge Weber (Laboratoire d'Instrumentation Electronique de Nancy, France)
1568951201	E6	<i>Concurrent Dual Loop, Mixed Mode Control Circuit for 10Gb/s Laser Diode Driver (LDD) IC with 0.13μm RF CMOS Technology</i> Daryoush Shiri, Maryam Rajabi, Neda Nouri (Unistar MicroTechnology Inc., Canada), Alireza Motieifar (University of Manitoba, Canada), Mahta Jenabi (Unistar MicroTechnology Inc., Canada), Ali Parsa (University of California, USA) and Ali Fotowat (Unistar MicroTechnology Inc., Canada)
1568953383	E7	<i>A Fully differential CMOS Limiting Amplifier with Active Inductor for Optical Receiver</i> Yanjie Wang, M. Zamin Khan, S. Masood Ali and Rabin Raut (Concordia University, Canada)

1568950708	E8	<i>Optimization of the Albery and Hespelt Carrier Frequency Error Detection Algorithm</i>
		Reza Danesfahani (University of Kashan, Iran), Ali Montazeri and Neda Rezaei Malek (Azad University, Iran)
1568952815	E9	<i>Two New Decision Directed M-PSK Timing Error Detectors</i>
		Yair Linn (University of British Columbia, Canada)
1568953270	E10	<i>A Novel Approach for Iterative Channel Estimation Using Data Symbols of Space-Time Block Codes</i>
		Bashir Iqbal Morshed (Carleton University, Canada) and Behnam Shahrava (University of Windsor, Canada)
1568953351	E11	<i>New Multiple-Model Channel Estimators for Equalization of DS-CDMA Fading Mobile Channels</i>
		Tan-Jan Ho and Bor-Sen Chen (National Tsing Hua University, Taiwan)
1568950134	E12	<i>A Synchronization Technique for Ultrawideband Systems Using IEEE Standard Channel Model</i>
		Xia Cheng and Anh Dinh (University of Saskatchewan, Canada)

May 3, Tuesday Afternoon, 1:30-4:30pm

Poster Session 3, Saskatchewan C, Software

1568953376	SW1	<i>Copyright Protection of J2EE Web Applications through Watermarking</i>
		Feiyuan Wang, Jiying Zhao and Abdulmotaleb El Saddik (University of Ottawa, Canada)
1568952543	SW2	<i>Fast template matching algorithm for line pictures based on its chain coded description</i>
		Yoshihiro Kato and Osamu Nakamura (Kogakuin University, Japan)
1568952679	SW3	<i>Dynamic Capacity Allocation for Quality-of-Service Support in IP-Based Satellite Networks</i>
		Nicolae Iuoras and Tho Le-Ngoc (McGill University, Canada)
1568952680	SW4	<i>Traffic Engineering Evaluation Platform for QoS-aware DiffServ-MPLS Networks</i>
		Inny Hu, Mohamed Ashour, Tho Le-Ngoc (McGill University, Canada) and Yves Lemieux (Ericsson Research Canada, Canada)
1568952941	SW5	<i>Call Center Performance Evaluation</i>
		Tariq Omari and Hussein Al-Zubaidy (Carleton University, Canada)
1568951690	SW6	<i>Building Data Warehouses with Incremental Maintenance for Decision Support</i>
		A. Halim Elamy, Reda S. Alhajj and Behrouz H. Far (University of Calgary, Canada)
1568951116	SW7	<i>System Science Models of Software Engineering</i>
		Yingxu Wang (University of Calgary, Canada)
1568953042	SW8	<i>Sociological Models of Software Development</i>
		Yingxu Wang (University of Calgary, Canada)
1568950747	SW9	<i>An Operational Semantics for RTPA</i>
		Cyprian F. Ngolah and Yingxu Wang (University of Calgary, Canada)
1568951015	SW10	<i>Economic Models of Software Engineering and the Software Maintenance Crisis</i>
		Yingxu Wang (University of Calgary, Canada)
1568953046	SW11	<i>On the Organization Laws of Software Engineering</i>
		Yingxu Wang (University of Calgary, Canada)

1568951112	SW12	<i>Formal Models of Object-Oriented Patterns using RTPA</i>
		Yingxu Wang and Jian Huang (University of Calgary, Canada)
1568951352	SW13	<i>Prioritized Selecting COTS Vendor in COTS-Based Software Development Process</i>
		Maree Mujeeb-u-Rehman, Xiaohu Yang, Jinxiang Dong and Memon Abdul Ghafoor (Zhejiang University, P.R. China)
1568950087	SW14	<i>Pair Programming in Software Evolution</i>
		Shaochun Xu (Laurentian University, Canada) and Xuhui Chen (Lanzhou University of Technology, Canada)

May 4, Wednesday Morning, 8:00-9:40am

WM11 Courtyard Rm, Communications and Networking 2

Chair: Shervin Erfani (University of Windsor, Canada)

1568952636	<i>An Overview of Metropolitan and Enterprise Networks - Current and Future</i>
	Nenad Jovanovic, Djordje Sorgic and Tianying Ji Shaowen Song (Wilfrid Laurier University, Canada)
1568953381	<i>Efficient Congestion Control for Streaming MPEG-4 Video Over Unreliable IP Networks</i>
	P.B. Ssesanga, N. Parimi, C. Martin and M.K. Mandal (University of Alberta, Canada)
1568951260	<i>Mobile-IP MPLS-Based Networks</i>
	Sasan Adibi, Mohammad Naserian and Shervin Erfani (University of Windsor, Canada)
1568953359	<i>Practical Security Strategy for SCADA Automation Systems and Networks</i>
	Fardeen Haji and Larry Lindsay (University of Guelph, Canada) and Shaowen Song (Wilfrid Laurier University, Canada)
1568953358	<i>A Comparative Study of the SIP and IAX VoIP Protocols</i>
	Taemoor Abbasi and Shekhar Prasad (Carleton University, Canada), Nabil Seddigh (Solana Networks, Canada) and Ioannis Lambadaris (Carleton University, Canada)

May 4, Wednesday Morning, 8:00-9:40am

WM12 Saskatoon Rm, Biomedical Engineering 2

Chair: Robert E. Gander (University of Saskatchewan, Canada)

1568951794	<i>A Peer-to-Peer-Based Medical Information Sharing System</i> Y. Mitamura (Hokkaido University, Japan), A. Yamamoto, H. Hayashi, T. Namioka and Y. Tsuduki (Asahikawa Highly Reliable Information Sharing Research Center, Japan), T. Shimono (Hokkaido University, Japan), H. Hirokawa, H. Yamakami and A. Yoshida (Asahikawa Med. College, Japan)
1568951499	<i>Biomedical Pattern Classification Using an Optimized Fuzzy Adaptive Logic Network</i> Narmada Retnakaran (University of Manitoba, Canada) and Nick Pizzi (Institute for Biodiagnostics National Research Council, Canada)
1568952874	<i>Computer Model Study of Regulatory Mechanisms During Airway Obstruction</i> Younhee Choi and Ying Sun (University of Rhode Island, USA) and Ernesto Goldman (Ohio State University, USA)
1568953257	<i>P300 Wave Feature Extraction: Preliminary Results</i> R. Fazel-Rezai and J. F. Peters (University of Manitoba, Canada)
1568953080	<i>Master/Slave Haptic Forceps with Applications to Robotic Surgery</i> Dylan Gunn and Roy Belak (University of British Columbia, Canada), Peter Rizun, Peter Goldsmith and Garnette Sutherland (University of Calgary, Canada)

May 4, Wednesday Morning, 8:00-9:40am

WM13 Manitoba Rm, Power Systems 5

Chair: Liuchen Chang (University of New Brunswick, Canada)

1568952730	<i>Selecting a High Specific Speed Pump for Low Head Hydro-Electric Power Generation</i>
	Salil Joshi, A. Gordon, L. Holloway and Liuchen Chang (University of New Brunswick, Canada)
1568951412	<i>Computation of Transmission Line Parameters for Power Flow Studies</i>
	J. S. Monteiro (Companhia Hidro Elétrica do São Francisco, Brazil), W. L. A. Neves, D. Fernandes Jr. and B. A. Souza (Federal University of Campina Grande, Brazil) and A. B. Fernandes (Operador Nacional do Sistema Elétrico, Brazil)
1568950806	<i>Basic Considerations in Generating Capacity Adequacy Evaluation</i>
	Roy Billinton and Dange Huang (University of Saskatchewan, Canada)
1568952729	<i>Power Transfer Analysis in Interconnected Fuel Cell-Distribution Network</i>
	Mamadou L. Doumbia and Kodjo Agbossou (Université du Québec à Trois-Rivières, Canada)
1568950810	<i>Consideration of Multi-State Weather Models In Reliability Evaluation of Transmission and Distribution Systems</i>
	Roy Billinton and Janak Acharya (University of Saskatchewan, Canada)

May 4, Wednesday Morning, 8:00-9:40am

WM14 Wig & Pen Rm, Analog Electronics and Instrumentation

Chair: Anh Dinh (University of Saskatchewan, Canada)

1568953025	<i>A PLL Based Analog Core Tester</i>
	Rashid Rashidzadeh, William C. Miller and Majid Ahmadi (University of Windsor, Canada)
1568953372	<i>A Multi-Level Phase/Frequency Detector for Clock and Data Recovery Applications</i>
	Jingcheng Zhuang and Tad Kwasniewski (Carleton University, Canada)
1568950067	<i>Ultra Low Noise, Low Cost Octave-Band Hybrid-Tuned VCO</i>
	Ulrich A. Rohde, Ajay K. Poddar and Reimund Rebel (Synergy Microwave Corp, USA)
1568953342	<i>SNR-Based Design Technique for Broadband LNAs</i>
	Reza Molavi and Shahriar Mirabbasi (University of British Columbia, Canada) and Majid Hashemi (SiRF Technology Inc., USA)
1568953020	<i>An Ultra Low-Power, Fully Monolithic SiGe HBT Distributed Amplifier</i>
	Ehab Y. El-Badry and Yaser M. Haddara (McMaster University, Canada)

May 4, Wednesday Morning, 8:00-9:40am

WM15 Brass Lantern Rm, Transceiver Implementation

Chair: Duncan G. Elliott (University of Alberta, Canada)

1568951749	<i>Fixed-Point Turbo Decoder Implementation suitable for Embedded Applications</i>
	Marco A. Castellon, Ivan J. Fair and Duncan G. Elliott (University of Alberta, Canada)
1568952208	<i>Investigation of Compact Hardware Implementation of the Advanced Encryption Standard</i>
	Namin Yu and Howard M. Heys (Memorial University of Newfoundland, Canada)
1568952526	<i>A Comparison of Analog Front End Architectures for Digital Receivers</i>
	Holly Pekau and James W. Haslett (University of Calgary, Canada)
1568953202	<i>A VLSI Architecture of a DS-CDMA Decision Feedback Multistage Parallel Interference Cancellation Detector</i>
	Lotfi Mejri and Adel Omar Dahmane (Université du Québec à Trois-Rivières, Canada)
1568953366	<i>Maximum A Posteriori Bit-Rate Detectors for Variable-Gain Multiple-Access Systems in Unknown Gaussian Channel</i>
	A.A. Tadaion and S. Gazor (Queen's University, Canada)

May 4, Wednesday Morning, 10:00-11:40am

WM21 Courtyard Rm, Source and Channel Coding

Chair: Raveendra K. Rao (University of Western Ontario, Canada)

1568950982	<i>Joint source-channel turbo decoding of MPEG-4 motion vectors</i>
	Marion Jeanne (IRISA-INRIA, France) and Pierre Siohan (France Telecom, France)
1568953218	<i>Joint Source and Channel Coding for H.264 Compliant Stereoscopic Video Transmission</i>
	P.Y. Yip, J.A. Malcolm (University of Hertfordshire, United Kingdom), W.A.C. Fernando, K.K. Loo and H. Kodikara Arachchi (Brunel University, United Kingdom)
1568953347	<i>An Ancestor Based Survivor Decision in M-Algorithm Convolutional Decoder</i>
	Seyed Ali Gorji Zadeh and M. Reza Soleymani (Concordia University, Canada)
1568952813	<i>Iterative Ordered-Statistic Decoding for LDPC Coded Modulation Systems</i>
	Huy G. Vu, Ha H. Nguyen and David E. Dodds (University of Saskatchewan, Canada)
1568953053	<i>Design of Space-Time Trellis Codes with Multi-h CPM Signals</i>
	Ali R. Ahmadi and Raveendra K. Rao (University of Western Ontario, Canada)

May 4, Wednesday Morning, 10:00-11:40am

WM22 Saskatoon Rm, Computer Networks and Systems 3

Chair: Sudhakar Ganti (University of Victoria, Canada)

1568953228	<i>Comparing high resolution timestamps in computer clusters</i> Hicham Marouani and Michel R. Dagenais (École Polytechnique de Montréal, Canada)
1568952938	<i>On The Effect of Traffic Model to the Performance Evaluation of Multicast Protocols in MANET</i> Tariq Omari, Greg Franks and Murray Woodside (Carleton University, Canada)
1568948970	<i>Bit boundary testing coverage</i> Goga Nicolae (CWI - National Research Institute for Mathematics and Computer Science in the Netherlands, Netherlands) and Florica Moldoveanu (Politehnica University of Bucharest, Romania)
1568952706	<i>Error Correction on 64/66 bit Encoded Links</i> Bijan Raahemi (University of Ottawa, Canada)
1568952441	<i>Differentiated Back-off for Ethernet</i> Sudhakar Ganti (University of Victoria, Canada) and Bijan Raahemi (University of Ottawa, Canada)

May 4, Wednesday Morning, 10:00-11:40am

WM23 Manitoba Rm, Electric Machines and Drives 2

Chair: Ahmed M. El-Serafi (University of Saskatchewan, Canada)

1568952656	<i>Analytical and Numerical Calculation of Natural Resonance Frequencies in Case of Machines with a Concentrated Stator Winding System</i>
	C. Grabner (Research and Development Motors, Siemens AG, Germany)
1568953285	<i>Effect of the Main Flux Saturation on the Transient Short-Circuit Performance of Synchronous Machines</i>
	Narayan C. Kar (University of Windsor, Ontario, Canada) and Ahmed M. El-Serafi (University of Saskatchewan, Canada)
1568953254	<i>A Linearized Model of Saturated Self-Excited Synchronous Reluctance Generator</i>
	Souvik Guha and Narayan C. Kar (University of Windsor, Canada)
1568953339	<i>Performance assessment of 18-pulse 3-phase rectifiers using harmonic reducing auto-transformers</i>
	J. Salmon and I. Roberge (University of Alberta, Canada)
1568952736	<i>FEM Study on Permanent Magnet Synchronous Generators for Small Wind Turbines</i>
	Zhenhong Guo and Liuchen Chang (University of New Brunswick, Canada)

May 4, Wednesday Morning, 10:00-11:40am
WM24 Wig & Pen Rm, Robotics and Human-Machine Interaction

Chair: Nasser Houshang (Purdue University Calumet, USA)

1568952580	<i>Concept Design and Dynamic Modeling of a Medical Parallel Manipulator to Assist in Cardiopulmonary Resuscitation</i>
	Yangmin Li and Qingsong Xu (University of Macau, Macao SAR)
1568953204	<i>Accurate Mobile Robot Position Determination Using Unscented Kalman Filter</i>
	Nasser Houshang and Farouk Azizi (Purdue University Calumet, USA)
1568953350	<i>H infinite Filter in Autonomous Robot Navigation</i>
	Wu Wei, Xu Xinhe, Wang Zhongshi (Northeastern University, P.R.China), Liu Chunfang and Ren Jiwu (Shenyang University of Technology, P.R.China)
1568953178	<i>Assisting in fault localization by using visual Programming Constructs</i>
	Marcel R. Karam and Ayman Abi-Abdallah (American University of Beirut, Lebanon)
1568951317	<i>Displaying the State of an Electric System: A Preliminary Study</i>
	Ian G. Sloman (Communications, Protection & SCADA, SaskPower, Canada) and Luigi Benedicenti (University of Regina, Canada)

May 4, Wednesday Morning, 10:00-11:40am

WM25 Brass Lantern Rm, Ad-Hoc Networks

Chair: Mieso K. Denko (University of Guelph, Canada)

1568950803	<i>A Hybrid Error Control Scheme for MANET Reliable Multicast</i>
	Bo Rong, Kais Mnif, Michel Kadoch (Université du Québec, Canada) and Ahmed K. Elhakeem (Concordia University, Canada)
1568951252	<i>A Fast Handover M-MANET with QoS Support</i>
	Sasan Adibi, Mohammad Naserian and Shervin Erfani (University of Windsor, Canada)
1568952817	<i>Characterization of ANEXT in 10GBASE-T Systems</i>
	Pranavi Anand and Stephen Bates (University of Alberta, Canada)
1568953308	<i>An Architecture for Integrating Mobile Ad hoc Networks with the Internet using Multiple Mobile Gateways</i>
	Mieso K. Denko and Chen Wei (University of Guelph, Canada)
1568953203	<i>MAC Layer Misbehavior in Ad Hoc Networks</i>
	Lei Guang and Chadi Assi (Concordia University, Canada)

May 4, Wednesday Morning, 8:30-11:30am

Poster Session 4, Saskatchewan C, Communication

Chair: Ron J. Palmer (University of Regina, Canada)

1568951506	C1	<i>Analysis of ADSL2's 4D-TCM Performance</i> Mohamed Ghanassi, Jean François Marceau, François D. Beaulieu and Benoît Champagne (McGill University, Canada)
1568952805	C2	<i>Phase-Coded Nonlinear Asymmetric Chirp Modulation</i> Bhumi A. Dave and Raveendra K. Rao (The University of Western Ontario, Canada)
1568952992	C3	<i>Performance Analysis of PSK Systems in the Presence of Slow Fading, Imperfect Carrier Phase Recovery, and AWGN</i> Iyad Al Falujah and Vasant K. Prabhu (University of Texas at Arlington, USA)
1568953072	C4	<i>Asymptotically Minimum-BER Tx-Rx Design for MIMO Channel Under ZF Constraint</i> A. Yasotharan (Radarcom Signals, Canada)
1568953061	C5	<i>On the Simulation of Stochastic Iterative Decoder Architectures</i> Anthony Rapley and Vincent Gaudet (University of Alberta, Canada) and Chris Winstead (Utah State University, USA)
1568953252	C6	<i>Area-Efficient Parallel White Gaussian Noise Generator</i> Amirhossein Alimohammad, Bruce F. Cockburn and Christian Schlegel (University of Alberta, Canada)
1568953375	C7	<i>Overview of Oversampling Clock and Data Recovery Circuits</i> S.I. Ahmed and Tad A. Kwasniewski (Carleton University, Canada)
1568953255	C8	<i>A QPSK Direct Digital Modulator in GaAs HBT at 28 GHz</i> Yi Sun and A.P. Freundorfer (Queen's University, Canada) and Dave Sawatzky (Gain Microwave, Canada)
1568951231	C9	<i>Computationally Efficient Algorithm for Reducing the Complexity of Software Radio Receiver's Filter Bank</i> Malihah Hassani and Mohammad Reza Karami-Mollaei (University of Mazandaran, Iran) and Mahmoud Mohammad-Taheri (University of Tehran, Iran)

1568953236	C10	<i>Antenna Beamwidth Effects on Capacity of MIMO and Multi-Beam Phased Array Systems</i>
		Sima Noghanian and Reza Fazel-Rezai (University of Manitoba, Canada)
1568953196	C11	<i>Triple Hybrid Selection/Maximal-Ratio Combining in Exponentially Correlated Rayleigh Fading</i>
		Xiaodi Zhang and Norman C. Beaulieu (University of Alberta, Canada)
1568952442	C12	<i>Investigation of Reflection Properties of Reactive Impedance Substrates</i>
		Alireza Foroozesh and Lotfollah Shafai (University of Manitoba, Canada)

May 4, Wednesday Morning, 8:30-11:30am

Poster Session 4, Saskatchewan C, Signal Processing

1568953151	SP1	<i>Nouveau Wrapper P1500 Incorporant une Structure BIST pour le Test des IP et des Interconnexions d'un SOC</i> Abdelaziz Larab and Abdelhakim Khouas (École Polytechnique de Montréal, Canada)
1568952474	SP2	<i>Scaling the Noise Parameters for Sliced Model of a mm-Wave FET</i> Gholamreza Moradi (Civil Aviation Technology College, Iran), Ramin Khosravi (Iran Telecommunication Research Centre, Iran) and Abdolali Abdipour (Polytechnic University, Iran)
1568951639	SP3	<i>Existing and Emerging Image Quality Metrics</i> Richard Dosselmann (University of Regina, Canada) and Xue Dong Yang (TRLabs, Canada)
1568953206	SP4	<i>A Weighted Pseudo-Zernike Feature for Face Recognition</i> Shahpour Alirezaee (AmirKabir University, Iran), Majid Ahmadi (University of Windsor, Canada) and Hassan Aghaeinia (AmirKabir University, Iran)
1568953267	SP5	<i>Comparison of Entropy-Based Characterization of Lightning Strike Maps using Planar and Spherical Coordinates</i> A. Faghfouri, W. Kinsner (University of Manitoba, Canada) and D. Swatek (Manitoba Hydro, Canada)
1568953026	SP6	<i>Evaluation of Robust Interframe MPEG Video Watermarking</i> Saeed Moradi and Saeed Gazor (Queen's University, Canada)
1568951325	SP7	<i>An Improved Algorithm for Image Registration using Robust Feature Extraction</i> Mohamed S. Yasein and Pan Agathoklis (University of Victoria, Canada)
1568951501	SP8	<i>Novel Approaches to Placement</i> William Kocay and Robert D. McLeod (University of Manitoba, Canada)
1568950877	SP9	<i>A Review of 2D/3D IIR Plane-Wave Real-time Digital Filter Circuits</i> Arjuna Madanayake and Leonard T. Bruton (University of Calgary, Canada)

May 4, Wednesday Morning, 8:30-11:30am

Poster Session 4, Saskatchewan C, Power Systems

1568950712	P1	<i>Flicker Source Identification by Interharmonic Power Direction</i>
		Dahai Zhang and Wilsun Xu (Shandong University, P.R. China) and Alexandre Nassif (University of Alberta, Canada)
1568951564	P2	<i>Theoretical Explanation of Hyper-plane Boundary of Dynamic Security Region</i>
		Yuan Zeng, Yixin Yu and Hongjie Jia (Tianjin University, P.R. China)
1568948674	P3	<i>Damping Power System Oscillations using a Fuzzy Logic Based Unified Power Flow Controller</i>
		A. A. Eldamaty and S. O. Faried (University of Saskatchewan, Canada), S. Aboreshaid (GOTEVOT, Saudi Arabia)
1568950823	P4	<i>Incorporating Maintenance Outage Effects in Substation and Switching Station Reliability Studies</i>
		Roy Billinton and Hua Yang (University of Saskatchewan, Canada)
1568951266	P5	<i>Artificial Neural Network Applications for Power System Protection</i>
		Gaganpreet Chawla, Mohindar S. Sachdev and G. Ramakrishna (University of Saskatchewan, Canada)
1568953024	P6	<i>New High Precision Harmonic Analysis Method for Power Quality Assessment</i>
		Lucian Mandache and Kamal Al-Haddad (École de Technologie Supérieure, Canada)
1568951261	P7	<i>Discussion on the Initialization of the EMTP-Type Programs</i>
		K. W. Louie, A. Wang, P. Wilson and P. Buchanan (Manitoba HVDC Research Centre, Canada)
1568951259	P8	<i>Aggregation of Induction Motors Based on their Equivalent Circuits under Some Special Operating Conditions</i>
		K. W. Louie (Manitoba HVDC Research Centre, Canada)
1568949794	P9	<i>A Method for the Identification of Micro-Turbines using a Hammerstein Model</i>
		F. Jurado, M. Valverde and M. Ortega (University of Jaén, Spain)

1568954846	P10	<i>A New Adaptive Multidimensional Load Shedding Scheme using Genetic Algorithm</i> M. Sanaye-Pasand and M. Davarpanah (University of Tehran, Iran)
1568951375	P11	<i>Reliability and Condition Monitoring of a Wind Turbine</i> M. Mohsin Khan, M. Tariq Iqbal and Faisal Khan (Memorial University of Newfoundland, Canada)

May 4, Wednesday Morning, 8:30-11:30am

Poster Session 4, Saskatchewan C, Electronics

1568953334	E1	<i>A Component Oriented Software Engineering Approach to a Deeply Embedded Firmware based Control Platform.</i> Robert A. Andrews (Rob Andrews Consulting, Canada), Behan Webster (WebsterWood Consulting, Canada)
1568953335	E2	<i>Managing Component Variability with a Firmware Calibration Model; Reduced Manufacturing Costs and Freedom in Vendor Selection</i> Robert A. Andrews (Rob Andrews Consulting, Canada), Behan Webster (WebsterWood Consulting, Canada)
1568951193	E3	<i>Formal Description of a Real-Time Process Dispatcher</i> Fabricio Rusu-Banu and Yingxu Wang (University of Calgary, Canada)
1568952632	E4	<i>Measuring the Potential Benefits of a Dynamically Adaptive Cache Line Size</i> Jesús Hernández Tapia, Duncan G. Elliott and Bruce F. Cockburn (University of Alberta, Canada)
1568953324	E5	<i>Run-Time Reconfigurable Hardware Blocks for Multimedia Applications</i> Nizar Sakr and Voicu Groza (University of Ottawa, Canada)
1568953397	E6	<i>Parallel Processing of XML Databases</i> Ghassan Z. Qadah (American University of Sharjah, UAE)
1568950733	E7	<i>Effects of Shift-Left Operations on Complex Binary Numbers</i> Tariq Jamil (Sultan Qaboos University, Oman) and Usman Ali (COMSATS Institute of Information Technology, Pakistan)
1568951356	E8	<i>Motion Estimation by Segmentation and Prediction of Direction</i> S. M. Reza SoroshMehr and Shadrokh Samavi (Isfahan University of Technology, Iran), Shahram Shirani (McMaster University, Canada) and Hassan Tafazoli (Isfahan University of Technology, Iran)
1568951438	E9	<i>A New Pipeline Design for Binarization and Thinning of Fingerprint Images</i> Farshad Kheiri (Azad Shahrekord University, Iran), Shadrokh Samavi and Nader Karimi (Isfahan University of Technology, Iran)

1568950619	E10	<i>Test Results of Various CMOS Image Sensor Pixels</i>
		David Chung-Yu Li, Vincent C. Gaudet and Anup Basu (University of Alberta, Canada)
1568951194	E11	<i>Design of a Real-Time Virtual Machine (RTVM)</i>
		Steven Cavanagh and Yingxu Wang (University of Calgary, Canada)

May 4, Wednesday Morning, 8:30-11:30am

Poster Session 4, Saskatchewan C, Software

1568953332	SW1	<i>Incremental Hybrid Bayesian Network in Content-Based Image Retrieval</i>
		Baice Li (Jilin University, P. R. China) and Senmiao Yuan ((Changchun University, P. R.China)
1568953050	SW2	<i>Document Vector Compression and Its Application in Document Clustering</i>
		T. W. Fox (Intelligent Engines, Canada)
1568952697	SW3	<i>Predicted Vector Spectral Search Algorithm In Motion Estimation</i>
		Hassan Tafazoli, S. M. Reza SoroshMehr and Shadrokh Samavi (Isfahan University of Technology, Iran)
1568951292	SW4	<i>An Improved Exp-Golomb Codes for Efficient DCT Coefficients Coding</i>
		Wei Gao, Hua Li and Kaihua Liu (Tianjin University, P. R. China)
1568951255	SW5	<i>Topology Discovery for Network Fault Management using Mobile Agents in Ad-Hoc Networks</i>
		Adnan Ahmed and Behrouz Homayoun Far (University of Calgary, Canada)
1568953035	SW6	<i>A New Hybrid Task Sharing Method for Cooperative Multi Agent Systems</i>
		Y. Mohammadi (Ferdowsi University, Iran), Ali Tazari and M. Mehrandezh (University of Regina, Canada)
1568950725	SW7	<i>Implementation of the Kernel Techniques of Real-Time Process Algebra</i>
		Xinming Tan, Yingxu Wang and Cyprian F. Ngolah (University of Calgary, Algeria)
1568952700	SW8	<i>Pattern Recognition using Dual-Tree Complex Wavelet Features and SVM</i>
		G. Y. Chen and W. F. Xie (Concordia University, Canada)
1568950759	SW9	<i>A Denotational Semantics for RTPA</i>
		Xinming Tan and Yingxu Wang (University of Calgary, Canada)

1568950800	SW10	<i>Achieve Load Balancing and Avoid Bandwidth Fragmentation in MANET QoS Routing</i>
		Bo Rong and Michel Kadoch (Université du Québec à Montréal, Canada) and Ahmed K. Elhakeem (Concordia University, Canada)
1568951392	SW11	<i>A Distributed Approach for Computing the Minimum Connected Dominating Set in AdMay Hoc Networks</i>
		Kais Mnif (Université du Québec à Montréal, Canada)
1568952995	SW12	<i>Mobile Ad-Hoc Networks with QoS and RSVP Provisioning</i>
		Sasan Adibi and Shervin Erfani (University of Windsor, Canada)
1568953360	SW13	<i>On the Connectivity of Nodes in Wireless Ad Hoc and Sensor Networks</i>
		Mohammad Naserian, Kemal Tepe and Tarique Mohammed (University of Windsor, Canada)
1568949999	SW14	<i>Using Prediction to Provide Decision Support for the Elicitation of User Preferences</i>
		Tom Wanyama and Behrouz Homayoun Far (University of Calgary, Canada)
1568952905	SW15	<i>New Operators for Integer Permutation-based Particle Swarm Optimizer</i>
		Ahmed EL-Gallad and Mohamed El-Hawary (Dalhousie University, Canada)

May 4, Wednesday Afternoon, 1:40-3:00pm

WA1 Courtyard Rm, Microelectronics and Optoelectronics

Chair: Safa Kasap (University of Saskatchewan, Canada)

1568953251	<i>Electronic Dispersion Compensation ICs for High Speed Long Haul Lightwave Systems</i>
	A.P. Freundorfer, D. H. Choi, J. Lee and Y. Jamani (Queen's University, Canada)
1568953019	<i>The Effects of Large Signals on Charge Collection in Photoconductive X-Ray Image Detectors</i>
	M. Zahangir Kabir, Mohammad Yunus and Safa O. Kasap (University of Saskatchewan, Canada)
1568951866	<i>Photoluminescence Lifetime Distributions of Amorphous and Porous Semiconductors, and Organic Luminescent Materials; Wide-Band Quadrature Frequency Resolved Spectroscopy Extending over 11 Decades</i>
	T. Aoki, S. Kobayashi, K. Ikeda, T. Urashima, T. Kaneko and D. Saitou (Tokyo Polytechnic University, Japan)
1568953130	<i>Effects of Chromatic Dispersion in a Waveguide Bragg Grating Prism Based True Time-Delay Beamforming Module</i>
	Sébastien Blais and Jianping Yao (University of Ottawa, Canada)

May 4, Wednesday Afternoon, 1:20-3:00pm

WA2 Saskatoon Rm, Nanotechnology

Chair: David Klymyshyn (University of Saskatchewan, Canada)

1568953191	<i>Modeling and Analysis of LIGA Structural Micromachined Inductors on CMOS/BiCMOS Substrate</i>
	Xiaoyang Yu and David M. Klymyshyn (TRLabs and University of Saskatchewan, Canada)
1568951099	<i>Phase Noise Performance Comparison between LIGA-MEMS and On-chip CMOS Capacitors for a VCO Application</i>
	Leonard Fang, David Klymyshyn, Anh Dinh, Darcy Haluzan (TRLabs, Saskatchewan, Canada and University of Saskatchewan, Canada) and Sven Achenbach (University of Saskatchewan, Canada and Institute for Microstructure Technology (IMT), Germany)
1568953082	<i>Self-Locking Vertical Operation Single Crystal Silicon Micromirrors using Silicon-On-Insulator Technology</i>
	See-Ho Tsang and M. Parameswaran (Simon Fraser University, Canada)
1568952209	<i>A Novel Bistable Microelectromechanical Mechanism Utilizing Socket Joints</i>
	Nima Jahedi, Ian G. Foulds and M. Parameswaran (Ash) (Simon Fraser University, Canada)
1568951662	<i>A Pulse Width Modulation Controlled Bistable MicroElectroMechanical System</i>
	Ian G. Foulds, Robert W. Johnstone and M. Parameswaran (Ash) (Simon Fraser University, Canada)

May 4, Wednesday Afternoon, 1:20-3:00pm

WA3 Manitoba Rm, Artificial Intelligence

Chair: Mehran Mehrandezh (University of Regina, Canada)

1568951144	<i>A Combination of Genetic Algorithm and Simulated Annealing for Optimal DG Allocation in Distribution Networks</i>
	M. Gandomkar (Saveh Azad University, Iran), M. Vakilian and M. Ehsan (Sharif University of Technology, Iran)
1568953282	<i>A Hybrid Optimal-Approximate Path Planning Algorithm</i>
	David Mould and Michael C. Horsch (University of Saskatchewan, Canada)
1568951385	<i>An Integrated Approach Framework for Intelligent Monitoring, Diagnosis and Supervisory Control of Processes</i>
	Varanon Uraikul, Christine W. Chan and Paitoon Tontiwachwuthikul (University of Regina, Canada)
1568951247	<i>A Proposal for Self-Recognition in Robot Programming</i>
	Kamran Karimi, Howard J. Hamilton (University of Regina, Canada) and Mehran Mehrandezh (University of Regina, Canada)
1568953032	<i>Distributed Ontology Management System</i>
	Robert Harrison and Christine W. Chan (University of Regina, Canada)

May 4, Wednesday Afternoon, 1:20-3:00pm

WA4 Wig & Pen Rm, Detection and Estimation

Chair: R.M.A.P. Rajatheva (Asian Institute of Technology, Thailand)

1568952827	<i>A Robust Phase Detection Structure for M-PSK: Theoretical Derivations, Simulation Results, and System Identification Analysis</i>
	Yair Linn (University of British Columbia, Canada)
1568952980	<i>Bayesian Frame Synchronization for 802.11a WLANs: Experimental Results</i>
	Oktay Ureten, Nur Serinken (Communications Research Centre, Canada), Ryan A. Pacheco and Dimitrios Hatzinakos (University of Toronto, Canada)
1568953293	<i>A Hybrid Diversity Receiver Using Differential Detection and Conditional Combining</i>
	Paraskevas Polydorou and Paul Ho (Simon Fraser University, Canada)
1568952533	<i>Carrier Frequency Offset Recovery for a Zero-IF OFDM Receiver</i>
	Michael Mitzel and Eric Salt (University of Saskatchewan, TRILabs, Canada)
1568952820	<i>Pilot Sequence Aided Channel Estimation for Space Time Coded OFDM Systems</i>
	Kukajini Pirabakaran (University of Moratuwa, Sri Lanka) and R.M.A.P. Rajatheva (Asian Institute of Technology, Thailand)

May 4, Wednesday Afternoon, 1:20-3:00pm

WA5 Brass Lantern Rm, Software Engineering 2

Chair: Luigi Benedicenti (University of Regina, Canada)

1568952760	<i>Query Processing in Very Large XML databases</i> Ghassan Z. Qadah (American University of Sharjah, UAE)
1568951207	<i>Mining User Access Patterns Based on Web Logs</i> Xiangwei Liu (Tianjin University, Tianjin Polytechnic University, P.R. China), Pilian He (Tianjin University, P.R. China) and Qian Yang (University of Saskatchewan, Canada)
1568951350	<i>Heterogeneous and Homogenous Pairs in Pair Programming: An Empirical Analysis</i> Maree Mujeeb-u-Rehman, Xiaohu Yang, Jinxiang Dong and Memon Abdul Ghafoor (Zhejiang University, P.R. China)
1568950770	<i>Formally Describing the Abstract Data Type of Files using RTPA</i> Cyprian F. Ngolah, Yingxu Wang and Xinming Tan (University of Calgary, Canada)
1568951014	<i>On the Mathematical Laws of Software</i> Yingxu Wang (University of Calgary, Canada)

May 4, Wednesday Afternoon, 1:30-3:00pm

Poster Session 5, Saskatchewan C, Communication

Chair: Daniel H. Y. Teng (University of Saskatchewan, Canada)

1568952812	C1	<i>Quarternary Signal Sets for Digital Communications with Nonuniform Sources</i>
		Ha H. Nguyen and T. Nechiporenko (University of Saskatchewan, Canada)
1568953318	C2	<i>Performance Evaluation of LDPC codes in the Presence of ISI with Application to 10GBASE-T Ethernet</i>
		Saeed Sharifi Tehrani, Bruce F. Cockburn and Stephen Bates (University of Alberta, Canada)
1568948785	C3	<i>A cost function for simultaneous blind equalization and phase recovery of QAM Signals</i>
		Zhijun Zhang, Kunio Takaya and David E. Dodds (University of Saskatchewan, Canada)
1568951418	C4	<i>Suboptimal Decoding of Vector Quantization over a frequency-selective Rayleigh Fading CDMA Channel</i>
		Son X. Nguyen and Ha H. Nguyen (University of Saskatchewan, Canada)
1568951402	C5	<i>Broadband Characterization of the On-body Radio Channel</i>
		John Pinkney (Telecommunication Research Labs) and Abu Sesay (University of Calgary and Telecommunications Research Labs, Canada)
1568953307	C6	<i>An algorithm to determine Range Distance with a Frequency Hopping Spread Spectrum System</i>
		Pei Xu, Dr. Ron J. Palmer and Yi Jiang (University of Regina, Canada)
1568953315	C7	<i>A Ranging Algorithm that can Accommodate Motion for a Frequency Hopping (FH) Spread Spectrum System</i>
		Yi Jiang, Ron J. Palmer and Pei Xu (University of Regina, Canada)
1568950274	C8	<i>Efficient Algorithm Of OVSF Codes Allocation For W-CDMA</i>
		Wang Peng, Zhao Yu, Cao Dazhong and Kaihua Liu (Tianjin University, P.R.China)

1568953127	C9	<i>Product Codes for Multicarrier DS-CDMA Systems</i>
		M. Akhavan-Bahabadi and S. H. Jamali (University of Tehran, Iran)
1568954680	C10	<i>A Simplex K-Means Algorithm for Radio-Port Placement in Cellular Networks</i>
		Bahman Abolhassani (Iran University of Science and Technology, Iran) and J. Eric Salt (University of Saskatchewan, Canada)
1568951258	C11	<i>MSR Analysis in Micro-Mobility Networks</i>
		Sasan Adibi (University of Windsor, Canada)
1568952852	C12	<i>A New Denoising Method in Spread Spectrum Systems Based on Wavelet Transform</i>
		AmirReza Momen (Islamic Azad University, Iran), Hossein Ahmadi-Noubari (University of Tehran, Iran) and Alireza Mirzaee (Iran Telecommunication Research Center, Iran)
1568953319	C13	<i>The Designing of an Indoor Acoustic Ranging System Using the Audible Spread Spectrum LFM (Chirp) Signal</i>
		Hamid Farrokhi and Ronald J. Palmer (University of Regina, Canada)
1568953310	C14	<i>An Analysis of Multipath for Frequency Hopping Spread Spectrum Ranging</i>
		Pei Xu, Ronald J. Palmer and Yi Jiang (University of Regina, Canada)
1568953317	C15	<i>A Multipath Mitigation Technique in RF Ranging</i>
		Jenny Jin Xie, Ronald J. Palmer and David Wild (University of Regina, Canada)

May 4, Wednesday Afternoon, 1:30-3:00pm

Poster Session 5, Saskatchewan C, Signal Processing

1568952919	SP1	<i>Fractal-based Multiple Time Scale TCP-Friendly Congestion Control for Multimedia Streaming</i>
		Jun Lu, Qiuqi Ruan and Rongrong Ni (Beijing Jiaotong University, P.R. China)
1568951210	SP2	<i>Adaptive Directed Diffusion Routing in Wireless Sensor Network Based on Application</i>
		Zeng Yuan-yuan, Zeng Zi-ming (Wuhan University, P.R. China) and Xi Bo (Wuhan University, P.R. China)
1568952969	SP3	<i>A Novel Defense Mechanism against SYN Flooding Attacks in IP networks</i>
		Mohamad Chouman, Haidar Safa and Hassan Artail (American University of Beirut, Lebanon)
1568951537	SP4	<i>Metro Substation Automation Based Real-Time Embedded System</i>
		Qizhi Chen, Wang Xu (Southwest Jiaotong University, P.R.China) and Hamada H. Ghenniwa (University of Western Ontario, Canada)
1568953227	SP5	<i>Vehicle Localization in Underground Mines Using a Particle Filter</i>
		Warren Hawkins and Brian L.F. Daku (University of Saskatchewan, & TRILabs, Canada) and Arnfinn F. Prugger (Potash Corporation of Saskatchewan, Canada)
1568953651	SP6	<i>Local and Global Analysis of Multifractal Singularity Spectrum through Wavelets</i>
		A. Faghfour and W. Kinsner (University of Manitoba, Canada)
1568953200	SP7	<i>An Efficient Preprocessing Block for the Middle-Age Persian Manuscripts</i>
		Shahpour Alirezaee (University of Windsor, Canada), Hassan Aghaeinia, Karim Faez (AmirKabir University of Technology, Iran) and Rashid Rashidzadeh (University of Windsor, Canada)
1568953108	SP8	<i>A Multiple Data Embedding Technique for DRM Using Fresnel Transform</i>
		Seok Kang and Yoshinao Aoki (Hokkaido University, Japan)

1568953083	SP9	<i>An Improved FRIT Based On 9/7 Wavelet Base Vector</i>
		Xujing Guo, Zhengxin Hou and Kaihua Liu (Tianjin University, P.R. China)
1568953157	SP10	<i>A Case-Based Reasoning Method for Alarm Filtering and Correlation in Telecommunication Networks</i>
		Nahid Amani (Iran Telecommunication Research Center, Iran), Mahmood Fathy (University of Science and Technology, Iran) and Mehdi Dehghan (Amirkabir University of Technology, Iran)

May 4, Wednesday Afternoon, 1:30-3:00pm

Poster Session 5, Saskatchewan C, Power Systems

1568952524	P1	<i>A Genetic Algorithms Framework for Grey Non-Linear Programming Problems</i>
		Weihua Jin, Paitoon Tontiwachwuthikul, Christine W. Chan and Gordon H. Huang (University of Regina, Canada)
1568953253	P2	<i>Towards a Framework For Ontology Evolution</i>
		Daniel Obst and Christine W. Chan (University of Regina, Canada)
1568951393	P3	<i>Optimal Scheduling of Gas Pipeline Operation Using Genetic Algorithms</i>
		Hanh H. Nguyen and Christine W. Chan (University of Regina, Canada)
1568952897	P4	<i>Development of a Decision Support System for Groundwater Pollution Control at Coal-Mining Contaminated Sites</i>
		Xiaodong Zhang, Gordon Huang and Christine W. Chan (University of Regina, Canada)
1568952743	P5	<i>An Artificial Neural Network Based Transmission Loss Allocation For Bilateral Contracts</i>
		Rezaul Haque and N. Chowdhury (University of Saskatchewan, Canada)
1568951309	P6	<i>Power Factor Estimation of a Reluctance Synchronous Machine Using Artificial Neural Network</i>
		Mahmood Hosseini Aliabadi (Islamic Azad University, Iran), Seyed Ehsan Abdollahi and M. Mirsalim (Amirkabir University of Technology, Iran)
1568951312	P7	<i>Electromagnetic Field Calculation in an Axial Flux Solid Rotor Induction Motor</i>
		Seyed Ehsan Abdollahi, M.Mirzayee, M.Hosseini Aliabadi, M.Mirsalim, (Amirkabir University of Technology, Iran)
1568951415	P8	<i>Voltage Stability Affected by On-Load Tap Changer Considering Excitation Reactance of Induction Motor</i>
		Liang Wang, Yutian Liu, Zhaowen Luan (Shandong University, P.R. China)

1568951346	P9	<i>Secondary Voltage Control Based on Multiple Objective Linear Programming</i>
		Zhihao Yun , Hengxu Zhang, Yutian Liu (Shandong University, P.R. China) Hong Mu and Ming Lei (Dispatching Center of Shandong Electric Power Company, P.R. China)
1568954854	P10	<i>Fuel Cell Equivalent Circuit Models for Passive Mode Testing and Dynamic Mode Design</i>
		Ken Runtz and Megan Lyster (Univsersity of Regina, Canada)
1568954855	P11	<i>Impacts of load pattern variation in Iran power system on generation system planning.</i>
		A. Salimi. Beni (Bureau of Load Forecasting, Tavanir Co., Iran), Mahmud Fotuhi-Firuzabad (Sharif University of Technology, Iran), H. Gharagozloo (Tarbiat Modarres, Iran) and D. Farrokhzad (Tavanir Company, Iran)
1568954856	P12	<i>Reliability Evaluation of a Small Area in a Composite Power System Using Branch-Cutting Method and Load Uncertainty</i>
		H. Gharagozloo, Mahmud Fotuhi-Firuzabad (Sharif University of Technology, Iran), M.R. Haghifam (Tarbiat Modarres, Iran) and D. Farrokhzad (Tavanir Company, Iran)
1568948574	P13	<i>Intelligent System for Identification of Harmonics from Single phase Nonlinear Loads</i>
		Kingsley Umeh (National Univeristy of Malaysia (UKM), Malaysia) and Nnadozie Okafor (CHRISTO TELECOMS LTD, Nigeria)

May 4, Wednesday Afternoon, 1:30-3:00pm

Poster Session 5, Saskatchewan C, Electronics

1568953365	E1	<i>Performance Evaluation of Multiple-Valued Logic Circuits Using Statistical Approach</i>
		Daniel H. Y. Teng and Ronald J. Bolton (University of Saskatchewan, Canada)
1568952750	E2	<i>A Low Power Baseband Filter for DRM Receivers</i>
		Chong Sun, Huazhong Yang, Zaiwang Dong and Hui Wang (Tsinghua University, P.R. China)
1568950642	E3	<i>Approximate frequency counts in sliding window over data stream</i>
		Guoliang Nie and Zhengding Lu (Huazhong University of Science and Technology, P.R. China)
1568952659	E4	<i>Sliding Mode Control of Induction Motors with Minimized Control Effort: A Comparative Study</i>
		Mohammed S. Agamy (Queen's University, Canada)
1568953075	E5	<i>Implementing Ball Balancing Beam Using Digital Image Processing and Fuzzy Logic</i>
		Javaid Iqbal, Mehmood Anwar Khan, Saadia Tarar, Mariam Khan and Zeasth Sabahat (National University of Sciences & Technology, Pakistan)
1568949010	E6	<i>Automatic Tuning of Digital PID Controllers for MIMO Processes</i>
		Muhammad Ashraf and Riaz Mahmud (National University of Sciences and Technology, Pakistan)
1568953155	E7	<i>Power Oscillations Damping by means of the SSSC: a Multivariable Control Approach</i>
		J. Ghaisari (Isfahan University of Technology, Iran), A. Bakhshai and P.K. Jain (Queen's University, Canada)
1568952780	E8	<i>Angle of Attack Estimation and Aircraft Controller Design Using LQR Methods</i>
		Mohsen Zamani Fekri (Concordia University, Canada) and Mohammad Mobed (Sharif University of Technology, Iran)
1568953256	E9	<i>Performance Measurements of the Lucid Data Acquisition System</i>
		D. Chabot, R. Igarashi, D. Dodds and W. Eric Norum (University of Saskatchewan, Canada)

1568951714	E10	<i>Recognition of Syllables in a Continuous Stream of Speech by PARCOR Parameters of Linear Predictive Vocoder</i>
		Ying Cui and Kunio Takaya (University of Saskatchewan, Canada)
1568952099	E11	<i>Low Frequency Noise in Amorphous Silicon Thin-Film Transistors</i>
		Kanghyun Kim and Robert E. Johanson (University of Saskatchewan, Canada)
1568952134	E12	<i>1/f Noise in an Amorphous Selenium Photo-detector</i>
		Shaikh Hasibul Majid and Robert E. Johanson (University of Saskatchewan, Canada)
1568953231	E13	<i>Characterization of a MEMS Accelerometer for an Underground Mine Positioning System</i>
		Abu Maqsud, Brian L.F. Daku (University of Saskatchewan, Canada) and Arnfinn F. Prugger (Potash Corporation of Saskatchewan Inc., Canada)
1568950997	E14	<i>Modeling of Al_xGa_{1-x}As/GaAs Multi Quantum Well Photodetector (MQWP)</i>
		Ahmed Aboul-Seou, Moataz Soliman and Alaa Hafez (Alexandria University, Egypt)

May 4, Wednesday Afternoon, 1:30-3:00pm
Poster Session 5, Saskatchewan C, Software

1568953023	SW1	<i>Frame Synchronization for PSAM in AWGN and Rayleigh fading channel</i>
		Haozhang Jia and David E. Dodds (University of Saskatchewan, Canada)
1568952077	SW2	<i>A Fast Clustering Algorithm based on Grid and Density</i>
		Zhiwei Sun, Zheng Zhao, Hongmei Wang, Lianfang Zhang, Yantai Shu (Tianjin University, P.R. China) and Maode Ma (Nanyang Technological University, Singapore)
1568953102	SW3	<i>A Dynamic Extension of the Asynchronous Weak-Commitment Search Algorithm</i>
		Koragod Saenchai, Luigi Benedicenti and Raman Paranjape (University of Regina, Canada)
1568951200	SW4	<i>Parallel Web Prefetching on Cluster Server</i>
		Cairong Yan, Junyi Shen and Qinke Peng (Xi'an Jiaotong University, P.R. China)
1568951331	SW5	<i>Simulation of the Steam Generator of a Gas Refinery using Neural Networks</i>
		Taleb Moazzeni (Petroleum University of Technology, Iran)
1568952066	SW6	<i>Goal-Oriented or Scenario-Based Requirements Engineering Technique: What Should a Practitioner Select?</i>
		Subhas Misra, Vinod Kumar and Uma Kumar (Carleton University, Canada)
1568952069	SW7	<i>How Can i* Complement UML for Modeling Organizations?</i>
		Subhas Misra, Vinod Kumar and Uma Kumar (Carleton University, Canada)
1568951114	SW8	<i>Representation of Knowledge and Inference Rules in SEMEST+</i>
		Shuangshuang Zhang and Yingxu Wang (University of Calgary, Canada)

Author Index

Author	Paper Number(s)
Abbasi, Taemoor	1568953358
Abdallah, Ayman Abi	1568953178
Abd-El-Barr, Mostafa	1568952963, 1568952965
Abdipour, Abdolali	1568952474
Abdo, Ahmad	1568953321
Abdollahi, Seyed Ehsan	1568951309, 1568951312
Abdullah, Abu Nasser Mohammed	1568953364
Abid, Zine-Eddine	1568953065, 1568953068, 1568953070, 1568953071
Aboelaze, Mokhtar	1568953205
Abolhassani, Bahman	1568954680, 1568954681
Aboul-Seoud, Ahmed	1569850997
Abu Ali, Najah	1568953297
Abugharbieh, Rafeef	1568953262
Abul Hoda, Abdullah	1568952857
Acharya, Janak	1568950810
Achenbach, Sven	1568951099
Adedoyin, Steven	1568953222
Adibi, Sasan	1568951252, 1568951252, 1568951258, 1568951260, 1568951263, 1568952995, 1568953000
Adikari, Adikari	1568953189
Agamy, Mohammed	1568952659
Agarwal, Nainesh	1568952884
Agarwal, R. P.	1568952698
Agathoklis, Pan	1568951325, 1568953325
Agbossou, Kodjo	1568951487, 1568952729
Ahmadi, Ali	1568953053
Ahmadi, Hosein	1568952852
Ahmadi, Majid	1568952574
Ahmed, Adnan	1568951255
Ahmed, Asif Iqbal	1568953031
Ahmed, Syed	1568953375
Ahmed, Usman	1568951330
Aissa, Sonia	1568953291
Ait Mohamed, Otmane	1568953031, 1568953034
Akbari, Asghar	1568952651
Akhavan-Bahabadi, Mahshid	1568953127
Al Falujah, Iyad	1568952992
Alamr, Saleh	1568948674
Albuquerque, Joao Marcelo	1568952898

2005 Conférence Canadienne de génie électrique et informatique

Alexandrov, Dimiter	1568952781
Alexiuk, Mark	1568948673
Al-Haddad, Kamal	1568952971, 1568952973, 1568953024, 1568953158
Ali, Kashif	1568953205
Ali, Usman	1568950733
Aliabadi, Mahmood Hosseini	1568951309
Alimohammad, Amirhossein	1568953252
Alirezaee, Shahpour	1568953200, 1568953206
Al-Khateeb, Wajdi	1568953364
Allain, Marcel	1568953060
Alnuweiri, Hussein	1568953036
Alzahawi, Tara	1568951326
Al-Zubaidy, Hussein	1568952941
Amani, Nahid	1568953157
Ameer, Salah	1568951654
Anand, Pranavi	1568952817
Andrews, Robert	1568953334, 1568953335
Anpalagan, Alagan	1568953006
Antoniou, Andreas	1568953325
Aoki, Naofumi	1568952744
Aoki, Takeshi	1568951866
Aoki, Yoshinao	1568953108
Arachchi, Hemantha Kodikara	1568953189, 1568953218, 1568953222
Arifujjaman, Md.	1568951371
Artail, Hassan	1568952969
Ashour, Mohamed	1568952678, 1568952680
Ashraf, Muhammad	1568949010
Assi, Chadi	1568953149, 1568953203
Astrov, Igor	1568948668
Ateeg, Arjumand	1568952638
Atwood, J. William	1568951656
Ayat, Saeed	1568951181
Azami, Seyed Bahram Zahir	1568952974
Azizi, Seyyedmohsen	1568952806
Bagen,	1568950822
Bajcsy, Jan	1568953294, 1568953529
Bakhshai, Alireza	1568952702, 1568952703, 1568953155
Baloch, Mujeeb-u-Rehman Maree	1568951350, 1568951352
Balota, Adis	1568953534
Bassan, Sondeep	1568952577, 1568952579
Basu, Anup	1568950619

2005 Canadian Conference on Electrical and Computer Engineering

Bates, Stephen	1568953244, 1568953318
Baumgart, Andr	1568953289
Bayoumi, Mohamed	1568952738
Beaubrun, Ronald	1568951011, 1568952674
Beaulieu, Francois D.	1568951506
Beaulieu, Norman	1568953195, 1568953196, 1568953331
Beauvais, Jacques	1568951391
Bednarek, Martin	1568952638
Belak, Roy	1568953080
Benedicenti, Luigi	1568951317, 1568952870, 1568953102
Benmamar, Badr	1568952279
Bennis, Abderrahmane	1568951686
Berviller, Yves	1568952942
Bhargava, Vijay	1568953063
Bhattacharya, Pradeep	1568951212
Bhuiya, Ashikur	1568953230
Billinton, Roy	1568950806, 1568950810, 1568950822, 1568950823, 1568950825, 1568951333
Bishop, William	1568953519
Blais, Sebastien	1568953130
Blanchette, Handy	1568952973
Bolduc, Leonard	1568953223
Bolton, Ron	1568951323, 1568951621
Bonetto, Fabian	1568952811
Boone, Francois	1568951391
Bougataya, Mohammed	1568951530
Bozchalui, Mohammad Chehreghani	1568951732
Braganza, Sherman	1568953519
Brandon, Tyler	1568953247
Breen, Kristopher	1568953261
Brown, Sue	1568953124
Brunton, Alan	1568953313
Bruton, Leonard	1568950877
Bultitude, Robert J.C.	1568953233
Burbank, Jack	1568952824
Calitoiu, Dragos	1568952901
Cao, Binggang	1568951027, 1568952776
Cao, Lingzhi	1568953331
Cao, Qiwei	1568952894
Capretz, Luiz	1568951128
Castellon, Marco	1568951749
Cavanagh, Steven	1568951194
Celaya, Bernardo	1568953265
Chaari, Karim	1568952674

2005 Conférence Canadienne de génie électrique et informatique

Chabot, Daron	1568953256
Champagne, Benoit	1568951506, 1568953213
Chan, Christine	1568951385, 1568951393, 1568952524, 1568952525, 1568952897, 1568953032, 1568953253
Chandel, Rajeevan	1568951363
Chang, Kwan-Shi	1568951339
Chang, Liuchen	1568951027, 1568952730, 1568952735, 1568952736, 1568952776, 1568952831, 1568952869, 1568952893, 1568952894
Chang, Stella	1568953062
Chawla, Gaganpreet	1568951266
Cheevasuvit, Fusuk	1568952872
Chen, Bor-Sen	1568953351, 1568953355
Chen, Eric	1568952693
Chen, Gang	1568953220
Chen, Guangyi	1568952700
Chen, Li	1568953190, 1568953193
Chen, Qing	1568950710, 1568953164
Chen, Qizhi	1568951537
Chen, Xiang	1568951511
Chen, Xiaoyan	1568953137
Cheng, Lo Sing	1568952892
Cheng, Shengli	1568951254
Cheng, Xia	1568950134
Chiu, Yu-shan	1568951339
Cho, Choong-Ho	1568951460
Choi, Dok-Hee	1568953251
Choi, Jaeseok	1568951333, 1568951449
Choi, Younhee	1568952874
Chouinard, Jean-Yves	1568953192, 1568953268
Chouman, Mohamad	1568952969
Chowdhury, Nurul	1568952743, 1568953230
Christian, Vasseur	1568951374
Christoffersen, Carlos E.	1568953059
Clara, Richard	1568952821
Clinton, Andrew	1568953519
Cockburn, Bruce	1568952632, 1568953247, 1568953252, 1568953318
Cole, Eric	1568951246
Conan, Jean	1568951011
Cornet, Jerome	1568952985
Cornfield, Trevor	1568953344
Cota, Navin Gupta	1568952883
Cui, Ying	1568951714
Dabir, Ali	1568953160
Dadashzadeh, Mohammad	1568951732

Reza	
Dagenais, Michel	1568953228
Dahmane, Adel-Omar	1568953199, 1568953202
Dai, Ning	1568951676
Dai, Tao	1568951511
Daisuke, Takahashi	1568952159
Daku, Brian	1568953185, 1568953227, 1568953231, 1568953246
Damm, Gerard	1568952985
Danesfahani, Reza	1568950708
Danilo-Lemoine, Florence	1568953066
Dao, Dung	1568953045
Dasiewicz, Paul	1568951321
Datta, Suprakash	1568953205, 1568953219
Davarpanah, Mahdi	1568954846
Dave, Bhumi	1568952805
Dawod, Nadem	1568953047
Dawson, Francis	1568952693
Dazhong, Cao	1568950274, 1568950275
de Souza, Benemar Alencar	1568951412, 1568952898
DeForrest, Dan	1568951328
Dehghan, Mehdi	1568953157
Dehghani, Amir Kamal	1568953309
Demeter, Elemer	1568952959
Deng, Yong An	1568952378
Denidni, Tayeb A.	1568952907
Denko, Mieso	1568953308
Derbal, Youcef	1568952076
Deschenes, David	1568952057
Desjardins, Yvon	1568953833
Deslauriers, Isabel	1568952804
Despins, Charles	1568952996
Diaf, Abdunnaser	1568953295
Diduch, Chris	1568952831
Dinh, Anh	1568950134, 1568951099, 1568951486
Djahanshahi, Hormoz	1568953043
Dodds, David	1568948785, 1568951800, 1568952813, 1568953023, 1568953246, 1568953256, 1568953265, 1568954681
Dong, Zaiwang	1568952750
Dosselmann, Richard	1568951639
Doumbia, Mamadou Lamine	1568951487, 1568952729
Du, K.-L.	1568953248
Ehsan, Mehdi	1568951144
Elafia, Aziz	1568952803
Elamy, A.Halim	1568951264, 1568951690

2005 Conférence Canadienne de génie électrique et informatique

Elbadri, Mohammed	1568953357
El-Badry, Ehab	1568953020
El-Boustani, Abdelhakim	1568953274
Eldamaty, Amr	1568948674
ElDesouki, Munir	1568953126
EL-Gallad, Ahmed	1568952905
El-Hawary, Mohamed	1568952905
El-Keib, Abdurrahim	1568951333, 1568951449
Elliott, Duncan	1568951749, 1568951763, 1568952632, 1568952896, 1568953244, 1568953247, 1568953261
ElMoursi, Mohamed	1568951092
El-Ocla, Hosam	1568953288, 1568953295, 1568953371
El-Razouk, Hayssam	1568953070
El-Serafi, Ahmed	1568953285
Erfani, Shervin	1568951260, 1568951263, 1568952995, 1568953000
Errington, Angus	1568953246
Faghfour, Aram	1568953267, 1568953651
Fair, Ivan	1568951749
Fakler, Markus	1568951032
Fang, Leonard	1568951099
Far, Behrouz Homayoun	1568949999, 1568951255, 1568951327, 1568953057
Far, Reza Rashidi	1568953367
Fariad, Sherif	1568948674, 1568952959
Farooq, Umar	1568953278
Farrokhi, Hamid	1568953319
Farrokhzad, DDD	1568954855, 1568954856
Fathy, Mahmood	1568953157
Fazel-Rezai, Reza	1568953236, 1568953257
Fekri, Mohsen Zamani	1568952780, 1568952806
Fels, Deborah	1568950805
Feng, Quanyuan	1568948433
Ferens, Ken	1568953224
Fernandes Jr., D.	1568951412
Fernandes, A. B.	1568951412
Fernandes, Stenio	1568953009
Fernando, Anil	1568953189, 1568953218, 1568953222
Fernando, Xavier	1568952372
Filizadeh, Shaahin	1568951329
Fleury, Pascal	1568952971
Foroozesh, Alireza	1568952442
Fotuhi-Firuzabad, Mahmud	1568951732, 1568954855, 1568954856
Foulds, Ian	1568951662, 1568952209
Fox, Trevor	1568953050, 1568953052
Franks, Greg	1568952938
Freeman, George	1568953262

2005 Canadian Conference on Electrical and Computer Engineering

Frenz, Stefan	1568951032
Freundorfer, Al	1568953251, 1568953255
Fu, Peng	1568953374
Furlong, Michael	1568951638
Gadhok, Neil	1568953273
Gagnon, Richard	1568953223
Gandomkar, Majid	1568951144
Ganti, Sudhakar	1568952441
Gao, Wei	1568951292
Garba, Aminata Amadou	1568953294
Gardner, William	1568953344
Gaudet, Vincent	1568950619
Gazor, Saeed	1568953026, 1568953169, 1568953297, 1568953345, 1568953366, 1568953367, 1568953370
Ghaisari, Jafar	1568953155
Ghanassi, Mohamed	1568951506
Ghanem, Khalida	1568952907
Gharagozloo, HHH	1568954855, 1568954856
Ghazel, Mohsen	1568953262
Ghenniwa, Hamada	1568951537
Ghotbi, Mohsen	1568952564
Ghouili, Jamel	1568952803, 1568953276
Ghribi, Mohsen	1568952894
Gingrich, Douglas	1568953190
Goeckelmann, Ralph	1568951032
Goga, Nicolae	1568948967, 1568948970
Gokaraju, Rama	1568949135, 1568951266, 1568951326
Goldan, Amirhossein	1568953235
Goldsmith, Peter	1568953080
Gole, Ani	1568951329, 1568953005
Golestani, S. Jamaloddin	1568952420
Golipour, Ladan	1568953345
Gong, Guang	1568953183
Gong, Jianmin	1568950915
Gong, Tao	1568952482
Gong, Yue	1568953344
Gordy, James	1568951381
Gorinta, Rama Krishnam Raju	1568952836
Grabner, Christian	1568951473, 1568952656
Grami, Ali	1568952437, 1568952438, 1568952439
Grenier, Dominic	1568952996
Grewal, Gary	1568948681
Groza, Voicu	1568953249, 1568953324, 1568953357, 1568953374
Grush, Bern	1568953006

2005 Conférence Canadienne de génie électrique et informatique

Guang, Lei	1568953149, 1568953203
Guesdon, Vincent	1568951668
Guha, Souvik	1568953254
Gulliver, T. Aaron	1568950723, 1568950724
Gunn, Dylan	1568953080
Guo, Xujing	1568953083
Guo, Zhenghong	1568952736
Gupta, Madan	1568954853
Ha, Pham Viet	1568953268
Habibi, Ali	1568953299
Haddara, Yaser	1568952871, 1568953020, 1568953126, 1568953280
Haddoun, Abdelhakim	1568953276
Hafez, Alaa	1568950997
Hafez, Roshdy	1568953047
Haghifam, MMM.R.	1568954856
Haghighat, Hosein	1568952651
Haidar, Ali	1568952857
Haji, Fardeen	1568953359
Hall, Trevor	1568953321
Haluzan, Darcy	1568951099
Hamad, Mustapha	1568952857
Hamadene, Wassila	1568951374
Hamilton, Howard	1568951247
Haouaria, Sediri	1568951374
Haque, Ashraf Ul	1568950799
Haque, Rezaul	1568952743
Harrison, Robert	1568953032
Hasan, Abul	1568953193
Hasanuzzaman, Mohammad	1568952871
Hashemi, Majid	1568953342
Hashemi, Masoud	1568953027
Haslett, James	1568952526
Hassani, Malihah	1568951231
Hatzinakos, Dimitrios	1568952980
Hawkins, Warren	1568953227
Hayashi, Hiroki	1568951794
Hayes, Jerry	1568950915
Haythornthwaite, Ray	1568953124
Heys, Howard	1568951638, 1568952208
Hiemstra, David	1568952057
Hill, Darren	1568952057
Hjortland, Edvin	1568953193
Ho, Danny	1568951128
Ho, Paul	1568953293
Ho, Tan-Jan	1568953351, 1568953355

Holloway, Gordon	1568952730
Hongjie, Jia	1568951147, 1568951564
Hope, Tyna	1568951471
Horsch, Michael	1568953282
Hossain, Shamim	1568952707
Hosseini, Sied Hadi	1568952651
Hou, Zeng-Guang	1568954853
Hou, Zhengxin	1568953083
Houari, Nora	1568953057
Houle, Alain	1568951391, 1568951603
Houshang, Nasser	1568953204
Hsieh, Ying-Fan	1568953266
Hu, Bo	1568953195
Hu, Po	1568951270
Hu, Yinyi	1568952680
Hu, Zhiying	1568952525
Huang, Dange	1568950806
Huang, Gordon	1568952524, 1568952525, 1568952897
Huang, Jian	1568951112
Huang, Junling	1568951327
Hung, Patrick	1568953326
Huo, Wei	1568953149
Ibnkahla, Mohamed	1568952738
Igarashi, Ru	1568953256
Iniewski, Krzysztof	1568953043
Intajag, Sathit	1568952872
Ionescu, Dan	1568953357
Iqbal, Javaid	1568953075
Iqbal, Tariq	1568951322, 1568951375, 1568952484
Irman, Martin	1568953529
Itani, Wissam	1568953387
Ito, M Robert	1568950059
Iuoras, Nicolae	1568952679
Ivanov, Andre	1568953348
Jabr, Hany	1568952989
Jahedi, Nima	1568952209
Jahromi, Ali Naderian	1568952692
Jain, Neha	1568952698
Jain, Praveen	1568950709, 1568953155
Jamal Deen, M.	1568953126
Jamali, S. Hamid Reza	1568953127
Jamani, Yasser	1568953251
Jamil, Tariq	1568950733
Jamzad, Mansour	1568953162
Janiaut, Michael	1568952942

2005 Conférence Canadienne de génie électrique et informatique

Jaumard, Brigitte	1568951603
Jeanne, Marion	1568950982
Jenabi, Mahta	1568951201
Jharia, Bhavana	1568952698
Jia, Haozhang	1568953023
Jiang, Yan	1568950772
Jiang, Yi	1568953307, 1568953310, 1568953315
Jin, Mushi	1568953337
Jin, Weihua	1568952524
Jin, Zhigang	1568950772
Johanson, Robert	1568951328, 1568952099, 1568952134
Johnstone, Robert	1568948947, 1568951262, 1568951339, 1568951662
Joshi, Salil	1568952730
Jovanovic, Nenad	1568952636
Jurado, Francisco	1568949794
Jurgensen, Helmut	1568953362
Kabir, M. Zahangir	1568953019
Kaffas, Ahmed El	1568953006
Kaheel, Ayman	1568953036
Kang, Longyun	1568951027, 1568952776
Kang, Seok	1568953108
Kar, Narayan	1568952989, 1568953254, 1568953285
Karam, Jalal	1568952588
Karam, Marcel	1568953178
Karami-Mollaei, Mohammad Raza	1568951231
Karim, Karim S.	1568953235
Karimi, Kamran	1568951247
Karimi, Nader	1568951438
Karki, Rajesh	1568951206, 1568951270
Karmokar, Ashok	1568953063
Karmouch, Ahmed	1568952279, 1568953009
Kasap, Safa	1568951328, 1568953019
Kasch, William	1568952824
Kato, Yoshihiro	1568952543
Kaushik, Brajesh	1568952698
Ke, Hui	1568953001
Khafallah, Mohamed	1568952803
Khalesehossseini, Saeed	1568951389, 1568952220
Khan, Faisal	1568951375
Khan, Gul	1568951251
Khan, Jahangir	1568951322
Khan, M.Zamin	1568952047
Khan, Mariam	1568953075
Khan, Muhammad Mohsin	1568951375

2005 Canadian Conference on Electrical and Computer Engineering

Kharrat, Dia	1568953051
Khatibzadeh, Amir Ali	1568952574
Kheiri, Farshad	1568951438
Khorasani, Maziyar	1568953244
Khosroshahy, Masood	1568954681
Khouas, Abdelhakim	1568951669
Kim, Kanghyun	1568952099
Kinsner, Witold	1568953267, 1568953272, 1568953273, 1568953274, 1568953283, 1568953651
Klymyshyn, D.M.	1568951099, 1568953191
Kocay, William	1568951501
Kojabadi, Hossein Madadi	1568952894
Krief, Francine	1568952279
Krieger, Alexis	1568953378, 1568953380
Krishnan, Sri	1568953006
Kruchten, Philippe	1568953266
Kumar, Amit	1568953362
Kumer, Luck	1568952638
Kwan, Raymond	1568953300
Kwasniewski, Tad	1568953152, 1568953361, 1568953372
Kwon, Hyuck	1568953179
Ladak, Hanif	1568953056
Lafontaine, Jean de	1568953833
Laggoune, Hayet	1568951500, 1568951668
Lakhsasi, Ahmed	1568951530
Lambadaris, Ioannis	1568953160, 1568953165, 1568953259, 1568953358
Larab, Abdelaziz	1568953151
Laroussi, Kouider	1568948601
Laskowski, Marek	1568953275
Laternas, Darrell	1568951323
Laurent, Peyrodie	1568951374
Lee, Hyong Woo	1568951460
Lee, Jay	1568953251
Lee, Sae-Won	1568951262
Lee, Seung-Que	1568951460
Lei, Ming	1568951346
Lemieux, Yves	1568952680
Le-Ngoc, Tho	1568952677, 1568952678, 1568952679, 1568952680, 1568952681, 1568952682, 1568952783
Leon-Garcia, Alberto	1568953027
Leung, Cyril	1568953300
Li, Baice	1568953332
Li, David Chung-Yu	1568950619
Li, Donglin	1568953031
Li, Hua	1568951292, 1568951411

2005 Conférence Canadienne de génie électrique et informatique

Li, Jun	1568952810
Li, Kejun	1568952092
Li, Sha	1568953185
Li, Wei	1568950723, 1568950724
Li, Yangmin	1568952580
Liao, Renfei	1568952986
Liao, Simon X.	1568952982
Lindsay, Larry	1568953359
Linn, Yair	1568952815, 1568952827
Liu, Hongwu	1568948433
Liu, Kaihua	1568953040, 1568953083
Liu, Xiangwei	1568951207
Liu, Xiao	1568951250
Liu, Yongjie	1568953244
Liu, Yutian	1568951346, 1568951415
Liyanage, Upul Samarawickrama	1568953033
Logrippo, Luigi	1568953387
Loo, Kok Keong	1568953189, 1568953218, 1568953222
Lopes, Luiz A. C.	1568952378
Louie, Kwok-Wai	1568951259, 1568951261
Lu, Jun	1568952919
Luan, Zhaowen	1568951415
Luo, Fa-long	1568952512
Luo, Jiecai	1568951212
Lyster, Megan	1568954854
Ma, Mao De	1568952077
Ma, Ngok-Wah	1568953137
Maaref, Amine	1568953291
MacGregor, Eve	1568953266
Madanayake, Arjuna	1568950877
Mahmoud, Qusay	1568952551
Majid, Shaikh	1568952134
Majlesein, Hamid	1568951212
Makkar, Rupinder	1568953160
Malcolm, James	1568953218
Malhotra, Rishabh	1568951693
Malik, Ali	1568952888
Mandache, Lucian	1568953024
Mandal, Mrinal	1568953381
Manjikian, Naraig	1568952037
Mannino, Christian	1568952942
Maqsud, Abu	1568953231
Marceau, Jean Francois	1568951506, 1568953213
Marouani, Hicham	1568953228

2005 Canadian Conference on Electrical and Computer Engineering

Marshall, Philip	1568951763
Marsland, Ian	1568953047
Martin, Miguel Vargas	1568953305, 1568953326
Marwa, Hamour	1568953043
Massicotte, Daniel	1568951530
Masud, Md. Mehedi	1568953234
Mathieu, Frederic	1568953192
Mayasandra, Karthik	1568953056
Mayilavelane, Aroutchelvame	1568953123
McCool, Michael	1568953519
McLeod, Robert D.	1568951501
Mehrandezh, Mehran	1568951247, 1568953017, 1568953035
Mejri, Lotfi	1568953202
Mekhilef, Saad	1568949390
Meng, Shaoqing	1568950772
Mezghani, Ahmed	1568952495
Miar, Yasin	1568951305
Midy, Benito	1568952816
Mirabbasi, Shahriar	1568953043, 1568953333, 1568953342, 1568953348
Miremadi, Seyed Ghassem	1568952752
Miri, Ali	1568952892
Mirtaheri, S. Amir	1568952513
Mirzaee, Alireza	1568952852
Mirzayee, Mehran	1568951312
Misra, Subhas	1568952066, 1568952069
Mitamura, Yoshinori	1568951794
Mitzel, Michael	1568952533
Mnif, Kais	1568951392
Moazzeni, Taleb	1568951331
Mobed, Mohammad	1568952780
Mohamed, Safaa	1568951797
Mohammadi, Yahya	1568953035
Mohammad-Taheri, Mahmoud	1568951231
Mohammed, Tarique	1568953360
Moinudeen, Haja	1568953299, 1568953364
Mokri, Yasamin	1568953162
Molavi, Reza	1568953342
Moloney, Cecilia	1568953314
Momen, AmirReza	1568951305, 1568952852
Monteiro, Josivan Sampaio	1568951412
Mooij, Arjan	1568948967
Moradi, Gholamreza	1568952474
Moradi, Saeed	1568953026

2005 Conférence Canadienne de génie électrique et informatique

Morneau, Michel	1568951669
Morshed, Bashir Iqbal	1568953270
Moschopoulos, Gerry	1568952577, 1568952579
Mosharaf, Kayvan	1568953165
Motieifar, Alireza	1568951201
Motto, Alexis	1568953163
Mouftah, Hussein	1568953297
Mould, David	1568953282
Mrochuk, Jeff	1568952896
Mu, Hong	1568951346
Mudassir, Rizwan	1568953070, 1568953071
Muma, Kelsey	1568951523
Munirajan, Vignesh Kumar	1568951246
Munshi, Asad	1568953519
Naik, Kuldip	1568953017
Nakamura, Osamu	1568952542, 1568952543
Namioka, Tomoaki	1568951794
Nandi, Subhasis	1568952826
Naserian, Mohammad	1568951252, 1568951260, 1568953360
Nassif, Alexandre	1568950712
Ndjountche, Tertulien	1568952512
Nechiporenko, Tyler	1568952812
Nerguizian, Chahe	1568952996
Neti, Prabhakar	1568952826
Neves, Washington	1568951412
Nezamoddini-Kachouie, Nezamoddin	1568953328
Ngo, Van	1568953159
Ngolah, Cyprian	1568950747, 1568950748, 1568950770
Ngolah, Cyprian F.	1568950725
Nguyen, Ha	1568951396, 1568951397, 1568951418, 1568952812, 1568952813
Nguyen, Hanh	1568951393
Nguyen, Son	1568951418
Nguyen, Uyen Trang	1568953159
Nie, Guoliang	1568950642
Nie, Xiaojun	1568952985
Nielsen, John	1568951389, 1568952220
Noel, Peter	1568953152
Noghanian, Sima	1568953236
Norum, W. Eric	1568953256
Nouri, Neda	1568951201, 1568953333
Nussbaum, Doron	1568952901
Nyberg, Kjetil	1568953193
Obst, Daniel	1568953253

2005 Canadian Conference on Electrical and Computer Engineering

Okafor, Nnadozie	1568954874
Okonkwo, Remigius	1568952676
Olivier, Guy	1568952816
Omar, A. M.	1568949390
Omari, Tariq	1568952938, 1568952941
Ono, Hiroshi	1568952542
Oommen, John	1568952901
Ordonez, Martin	1568952484, 1568952811
O'shaughnessy, Douglas	1568952495
Ottley, Adam	1568951621
Pacheco, Ryan	1568952980
Pajuelo, Eli	1568949135
Palmer, Ron	1568953307, 1568953310, 1568953315, 1568953317, 1568953319
Panigrahi, Saswat	1568952677, 1568952682, 1568952783
Parameswaran, M.	1568948947, 1568951262, 1568951339, 1568951662, 1568952209, 1568953082
Paranjape, Raman	1568952870, 1568953102
Parimi, Nitin	1568953381
Park, Nam-Hoon	1568951460
Parsa, Ali	1568951201
Pasand, Reza	1568951389, 1568952220
Patel, Jaiminkumar	1568951206
Patel, Jasbir	1568953068
Paul, Piplu	1568953063
Pawlak, Mirek	1568952982
Pawlowski, Christopher	1568952635
Pekau, Holly	1568952526
Pelet, Eric	1568951673
Peng, Qinke	1568951200
Peng, Wang	1568950274, 1568950275
Peng, Yifan	1568953349
Perez, Sandro Aquiles	1568951113
Perron, Marc	1568953833
Peterkin, Raymond	1568953357
Picher, Patrick	1568953223
Pieper, Jeff	1568952098
Pierre, Samuel	1568951011
Pinkney, John	1568951402
Pinter, Stephen	1568952372
Pirabakaran, Kukajini	1568952820
Pizzi, Nick	1568951499
Plesnick, Martin	1568953067
Poddar, Ajay	1568950067, 1568950068
Polydorou, Paraskevas	1568953293

2005 Conférence Canadienne de génie électrique et informatique

Potter, Michael	1568953283
Prasad, Shekhar	1568953358
Prugger, Arnfinn	1568953227, 1568953231, 1568953246
Pugh, Jeffrey	1568953233
Puri, Ronesh	1568953006
Qadah, Ghassan	1568952760, 1568953397
Qadri, Syed Salman	1568953051
Qahraman, Behzad	1568953005
Quaicoe, John	1568951322, 1568952484
Raahemi, Bijan	1568952441, 1568952706
Raahemifar, Kaamran	1568952574, 1568953029, 1568953123
RABAH, HASSAN	1568952942
Rad, Hamidreza Saligheh	1568953169
Raei, Saed	1568952651
Rahbar, Akbar Ghaffar Pour	1568953015
Rahim, N. A.	1568949390
Rahman, Quazi	1568952738
Raiter, Kamlesh	1568953217
Rajabi, Maryam	1568951201
Rajatheva, Nandana	1568952820
Ramachandran, Venkatanarayana	1568950799, 1568950909
Rao, Girish	1568953344
Rao, Raveendra	1568952805, 1568952821, 1568953053
Rapley, Anthony	1568953061
Rashidzadeh, Rashid	1568953025
Ray, Asim	1568952556
Regier, Chris	1568952098
Rehan, Mohamed	1568953325
Retnakaran, Narmada	1568951499
Ring, Sandy	1568951246
Rizk, Samer	1568953280
Rizun, Pete	1568953080
Roberge, Ian	1568953339
Robitaille, Mylène	1568951487
Rohde, Ulrich	1568950067, 1568950068
Rong, Bo	1568950800, 1568950803
Rowlands, John	1568953235
Runtz, Ken	1568954854
Rusu-Banu, Fabricio	1568951193
Saad, Abdallah	1568952803
Sabahat, Zeasth	1568953075
Sachdev, Mohindar S.	1568949135, 1568951113, 1568951254, 1568951266, 1568951326
Saddik, Abdulmotaleb El	1568953357, 1568953376

2005 Canadian Conference on Electrical and Computer Engineering

Sadok, Djamel	1568953009
Saenchai, Koragod	1568953102
Safa, Haidar	1568952969
Safavian, Leila	1568953272
Safavi-Naeini, S.	1568953340
Sakr, Nizar	1568953249, 1568953324
Salimi Beni, A.	1568954855
Salisbury, Jeffery	1568953193
Salmon, John	1568953339, 1568953378, 1568953380
Salt, Eric	1568951673, 1568952533, 1568954680
Samaan, Nancy	1568952279
Samavi, Shadrokh	1568951356, 1568951438, 1568952697
Sameni, Pedram	1568953043
Sanayepasand, Majid	1568954846
Sanyal, Sreemoyi	1568952379
Sarifuddin,	1568951668
Sarifuddin, M.	1568951500
Sarkar, Indranil	1568951694
Savary, Simon	1568953207
Sawatzky, Dave	1568953255
Scansen, Don	1568953124
Scharbach, David	1568951800
Schlegel, Christian	1568953252
Schmidt, Erich	1568952051
Schoettner, Michael	1568951032
Schulthess, Peter	1568951032
Seddigh, Nabil	1568953358
Seguin, Pierre	1568953180
Seifi, Hossein	1568952651
Semmar, Asia	1568953268
Seo, Jun Bae	1568951460
Sepasian, Sadegh	1568952651
Serinken, Nur	1568952980
Sesay, Abu B.	1568951402
Setu, Meer	1568952836
Shafai, Lotfollah	1568952442
Shah, Jayesh	1568952577
Shahidi, Reza	1568953314
Shahrava, Behnam	1568951511, 1568951654, 1568953270, 1568953301
Shaker, George S. A.	1568953340
Shami, Abdallah	1568953149
Sharaf, Adel	1568951092
Sharman, Raj	1568951694
Shaydurov, Alexander	1568952596
Sheikhaei, Samad	1568953348

2005 Conférence Canadienne de génie électrique et informatique

Shen, Junyi	1568951200
Shimakawa, Koichi	1568951853
Shimono, Tetsuo	1568951794
Shirahama, Hiroyuki	1568952857
Shirani, Shahram	1568951356
Shiri, Daryoush	1568951201
Shokrani, Arash	1568953165, 1568953259
Shu, Yantai	1568950772, 1568951474, 1568952077
Shwedyk, Ed	1568951397
Siddiqui, Sharjeel	1568953274
Sidhu, Samsher	1568953029
Sidhu, T.S.	1568951113, 1568952959
Sinnathamby, Mohanarajah	1568952037
Siohan, Pierre	1568950982
Siu, Chris	1568953043
Sivapathasundaram, Sureshkumar	1568951397
Sivonthaman, Siva	1568953062
Skozicki, Sean	1568951763
Skuletic, Sreten	1568953534
Sloman, Ian	1568951317
Solari, Yannick	1568951603
Soleymani, M. Reza	1568950915, 1568952564, 1568953347, 1568953385
Soliman , Moataz	1568950997
Song, Shaowen	1568952635, 1568952636, 1568952638, 1568953359
Sonnaillon, Maximilliano	1568952811
Sood, Vijay	1568952378
SoroshMehr, S.M.Reza	1568951356, 1568952697
Sousa, Andrea	1568952898
Spronk, Rene	1568948967
Ssesanga, Patrick	1568953381
Stevens, Kenneth	1568953034
Storgic, Diordje	1568952636
Su, Yonghao	1568951376
Sultana, Nargis	1568951656
Sun, Chong	1568952750
Sun, Jinyuan	1568953349
Sun, Yan	1568951359
Sun, Yi	1568953255
Sun, Zhi Wei	1568952077
Sundaram, Karthikeya K.	1568950909
Sutherland, Garnette	1568953080
Swamy, M.N.S.	1568953248
Swamy, Ramkrishna	1568953244
Swatek, David	1568953267

2005 Canadian Conference on Electrical and Computer Engineering

Sybille, Gilgert	1568953223
Sydhom, Ayman	1568951251
Tadaion, Ali Akbar	1568953366, 1568953370
Tafazoli, Hassan	1568951356, 1568952697
Tahar, Sofiene	1568953299
Takaya, Kunio	1568948785, 1568951693, 1568951714, 1568951797
Talim, Jerome	1568953165, 1568953259
Tan, Xinming	1568950725, 1568950726, 1568950759
Tanabian, Mohammad	1568952974
Tanougast, Camel	1568952942
Tapia, Jesus Hernandez	1568952632, 1568953261
Tarar, Saadia	1568953075
Tavares, Stafford	1568953183
Tayem, Nizar	1568953179
Tazari, Ali	1568953035
Tehrani, Saeed Sharifi	1568953318
Tellambura, Chintha	1568953045
Teng, Daniel	1568953365
Tepe, Kemal	1568951252, 1568953360
Thibault, Robert	1568953158
Thibodeau, Eric	1568951391
Tierney, Patrick	1568952974
Timorabadi, Hamid Shokrollah	1568952693
Tipsuwanporn, Vittaya	1568952872
Tizghadam, Ali	1568953027
Tontiwachwuthikul, Paitoon	1568951385, 1568952524
Torii, Keita	1568952115
Tran, Nghi	1568951396
Tran, Tinh	1568951449
Tsang, See-Ho	1568953082
Tse, Ben	1568952870
Tsuduki, Yuhma	1568951794
Tull, Monte	1568951686
Turanli, Hilmi	1568953272
Uddin, Mohammad	1568953030
Umeh, Kingsley	1568954874
Unbehauen, Rolf	1568952512
Uraikul, Varanon	1568951385
Ureten, Oktay	1568952980
Urteaga, Raul	1568952811
Usama, Muhammad	1568953361
Vaezi, Mojtaba	1568951305
Vakilian, Mehdi	1568951144
Vasefi, Fartash	1568953065

2005 Conférence Canadienne de génie électrique et informatique

Vaughan, Rodney	1568952513
Vigneron, Philip	1568953233
Voora, Suresh	1568953224
Vrscay, Edward	1568953262
Vu, Huy	1568952813
Wan, Quan	1568951486
Wang, Feiyuan	1568953376
Wang, Hong Mei	1568952077
Wang, Hui	1568952750, 1568953219
Wang, Jian	1568952776
Wang, Liang	1568951415
Wang, Ping	1568952681
Wang, Wei	1568953056, 1568953070
Wang, Xiaoyu	1568950710
Wang, Yanjie	1568952047, 1568953383
Wang, Yingxu	1568950725, 1568950726, 1568950747, 1568950748, 1568950759, 1568950770, 1568951014, 1568951015, 1568951112, 1568951114, 1568951116, 1568951192, 1568951193, 1568951194, 1568953042, 1568953046
Wang, Zheng	1568948744, 1568950193
Wangdee, Wijarn	1568950825
Wanyama, Tom	1568948909, 1568949999
Ward, Rabab	1568953262
Wassi, Gilles Ibrahim	1568952996
Weber, Serge	1568952942
Webster, Behan	1568953334, 1568953335
Wei, Chen	1568953308
Wells, Garth	1568951673
Wen, Hao	1568953030
Weng, Jianfeng	1568952681
Wesselink, Wieger	1568948967
Wiebe, Gordon	1568948673
Wilson, David	1568952985
Wilson, Tom	1568948681
Wong, Alex	1568953519
Wong, Kainam Thomas	1568953353
Woodside, Murray	1568952938
Wu, Wei	1568953350
Xia, Feng	1568950059
Xia, Wei	1568951128
Xiao, Lu	1568953183
Xiaodan, Yu	1568951147
Xie, Jin	1568953317
Xin, Yongqing	1568952982
Xu, Bin	1568950501

2005 Canadian Conference on Electrical and Computer Engineering

Xu, Daming	1568951027
Xu, Ming	1568948681
Xu, Pei	1568953307, 1568953310, 1568953315
Xu, Shaochun	1568950087
Xu, William	1568953290
Xu, Wilsun	1568950710, 1568950712, 1568952092
Xu, Xiaoyan	1568952716
Xu, Yang	1568952682, 1568952783
Yamamoto, Akihito	1568951794
Yan, Cairong	1568951200
Yang, Bin	1568953066
Yang, Boting	1568953290
Yang, Cungang	1568953137
Yang, Hua	1568950823
YANG, Huazhong	1568952750
Yang, Lin	1568953344
Yang, Oliver	1568951474, 1568953015
Yang, Tiebao	1568953301
Yang, Xiaoli	1568953164
Yang, Xue Dong	1568951639, 1568953290
Yao, Jianping	1568953130
Yao, Yizheng	1568951192
Yasein, Mohamed	1568951325
Yasotharan, Ambighairajah	1568953069, 1568953072
Yazdani, Davood	1568952702, 1568952703, 1568952806
Ye, Zhengmao	1568951212
Yeap, Tet	1568952892
Yeung, Jason	1568950805
Yin, Yun	1568952831
Ying, Nying	1568951763
Yip, Pik Yee	1568953218
Yixin, Yu	1568951564
Youssef, Amr	1568953183
Youssef, Mohamed	1568950709
Yu, Namin	1568952208
Yu, Wanneng	1568952716
Yu, Xiaoping	1568948681
Yu, Xiaoyang	1568953191
Yu, Zhao	1568950274, 1568950275
Yun, Zhihao	1568951346
Yunus, Mohammad	1568953019
Zadeh, Seyed Ali Gorji	1568953347, 1568953385
Zahir, Saif	1568951755
Zarandi, Hamid	1568952752
Zarkeshvari, Farhad	1568953152

2005 Conférence Canadienne de génie électrique et informatique

Zelmat, Mimoune	1568948601
Zeng, Qingrong	1568952893
Zeng, Yuan	1568951564
Zeng, Yuan-yuan	1568951210
Zewail, Rami	1568951763
Zhang, Dahai	1568950712
Zhang, Hao	1568950724
Zhang, Hengxu	1568951346
Zhang, Kai	1568952869
Zhang, Lianfang	1568950772, 1568951474, 1568952077
Zhang, Liang	1568951474
Zhang, Rui	1568953040
Zhang, Shuangshuang	1568951114
Zhang, Xiaodi	1568953196
Zhang, Xiaodong	1568952897
Zhang, Zhijun	1568948785
Zhao, Jianguo	1568952092
Zhao, Jiyong	1568953164, 1568953249, 1568953313, 1568953376
Zhao, Lian	1568953349
Zhao, Yiqiang Q.	1568952985
Zhao, Zheng	1568952077
Zhu, Haibin	1568953180
Zhu, Lei	1568953059
Zhuang, Jingcheng	1568953372
Zi-ming, Zeng	1568950058
Zitao, Wang	1568952735
Zolfaghari, Azita	1568952420

Paper Index

Legend:

MM: Monday Morning

TM: Tuesday Morning

WM: Wednesday Morning

MA: Monday Afternoon

TA: Tuesday Afternoon

WA: Wednesday Afternoon

P: Poster Session

P: Poster Session

P: Poster Session

1568948433	P1-C
1568948574	P5-P
1568948601	P1-P
1568948668	MA25
1568948673	P2-SW
1568948674	TA13
1568948681	MM4
1568948744	TA11
1568948785	TA21
1568948909	MM5
1568948947	MA13
1568948967	WM22
1568948970	WM22
1568949010	TA14
1568949135	MM3
1568949390	P2-P
1568949794	WM14
1568949999	P4-SW
1568950058	TA15
1568950059	MM2
1568950067	WM14
1568950068	WM14
1568950087	WM24
1568950134	WA4
1568950193	TM11
1568950274	TM11
1568950275	MA21
1568950501	MM5
1568950619	P4-E
1568950642	TM24
1568950708	WA4
1568950709	TA12
1568950710	TA13
1568950712	TA13
1568950723	TM11
1568950724	TM11
1568950725	TA25

1568950726	TA25
1568950733	TA24
1568950747	WA5
1568950748	TM14
1568950759	TA25
1568950770	WA5
1568950772	TM12
1568950799	TM22
1568950800	WM25
1568950803	WA4
1568950805	WM24
1568950806	WM13
1568950810	WM13
1568950822	MA23
1568950823	TA13
1568950825	MM3
1568950877	P4-SP
1568950909	TM22
1568950915	MA11
1568950982	WM21
1568950997	P5-E
1568951011	MA21
1568951014	WA5
1568951015	WA5
1568951027	P3-P
1568951032	MM2
1568951092	TM23
1568951099	WM14
1568951112	WA5
1568951113	TA13
1568951114	P5-SW
1568951116	WA5
1568951144	WA3
1568951147	TM23
1568951181	MA12
1568951192	TA15
1568951193	P4-E

1568951194	TM14
1568951200	P5-SW
1568951201	WM14
1568951206	MA23
1568951207	WA5
1568951210	WM22
1568951212	MA25
1568951231	WM21
1568951246	P3-SP
1568951247	WA3
1568951250	MA21
1568951251	TM14
1568951252	WA4
1568951254	MA
1568951255	TM25
1568951258	WM11
1568951259	P4-P
1568951260	WM11
1568951261	TA13
1568951262	WA2
1568951263	WM11
1568951264	TA15
1568951266	TA13
1568951270	TM23
1568951292	MA25
1568951305	P3-SP
1568951309	P5-P
1568951312	P5-P
1568951317	WM24
1568951321	MM5
1568951322	TA23
1568951323	TM12
1568951325	MA22
1568951326	TM23
1568951327	TA15
1568951328	P2-E
1568951329	MM3

2005 Conférence Canadienne de génie électrique et informatique

1568951330	MA24
1568951331	P5-SW
1568951333	MA23
1568951339	WA2
1568951346	P5-P
1568951350	WA5
1568951352	WA5
1568951356	TA24
1568951359	MA22
1568951363	MA24
1568951371	TA14
1568951374	TA22
1568951375	WM14
1568951376	TA15
1568951381	TA21
1568951385	WA3
1568951389	TM11
1568951391	WM14
1568951392	WM25
1568951393	WA3
1568951396	TA21
1568951397	TM11
1568951402	MA11
1568951411	TM12
1568951412	WM13
1568951415	P5-P
1568951418	WM21
1568951438	TA24
1568951449	MA
1568951460	MA21
1568951471	TA22
1568951473	MA13
1568951474	MA21
1568951486	TM11
1568951487	MA
1568951499	WM12
1568951500	MA25
1568951501	P4-SP
1568951506	TA21
1568951511	TM22
1568951523	TA24
1568951530	MA24
1568951537	WM22
1568951564	TA13
1568951603	WM11

1568951621	TA22
1568951638	MM2
1568951639	MA22
1568951654	TM22
1568951656	P3-SP
1568951662	WA2
1568951668	P2-SW
1568951669	MA24
1568951673	MA11
1568951676	TM25
1568951686	P1-E
1568951690	WA5
1568951693	TM15
1568951694	MA25
1568951714	WM24
1568951732	MA23
1568951749	WA3
1568951755	MA22
1568951763	TA24
1568951794	WM12
1568951797	MA22
1568951800	MA12
1568951853	TA12
1568951866	WA1
1568952037	MA24
1568952047	MM4
1568952051	MA13
1568952057	WM14
1568952066	MM5
1568952069	MM5
1568952076	TA15
1568952077	MA15
1568952092	TM23
1568952098	TM24
1568952099	TA12
1568952115	TM15
1568952134	TA12
1568952159	MA25
1568952208	WA3
1568952209	WA2
1568952220	MA12
1568952279	WM11
1568952372	MM1
1568952378	TM13
1568952379	TA22

1568952420	MA21
1568952437	MM1
1568952438	P1-C
1568952439	TA21
1568952441	WM22
1568952442	P4-C
1568952474	WA1
1568952482	MM5
1568952484	MA12
1568952495	WM24
1568952512	MA15
1568952513	TA11
1568952524	WA3
1568952525	TA14
1568952526	WA3
1568952533	WA5
1568952542	MA25
1568952543	TM15
1568952551	TM25
1568952556	TA12
1568952564	TM11
1568952574	MM4
1568952577	TM13
1568952579	TM13
1568952580	WM24
1568952588	MA12
1568952596	TA14
1568952632	TA24
1568952635	WM11
1568952636	WM11
1568952638	MM1
1568952651	MA
1568952656	WM23
1568952659	TM24
1568952674	WM11
1568952676	P2-P
1568952677	TA11
1568952678	TM25
1568952679	TM25
1568952680	TM25
1568952681	MM1
1568952682	TA21
1568952692	WM13
1568952693	MM3
1568952697	MA25

2005 Canadian Conference on Electrical and Computer Engineering

1568952698	P1-E
1568952700	TA25
1568952702	TM13
1568952703	TM23
1568952706	WM22
1568952707	MM1
1568952716	P1-SW
1568952729	WM13
1568952730	WM13
1568952735	TA23
1568952736	WM23
1568952738	MM1
1568952743	WM13
1568952744	TM12
1568952750	MA14
1568952752	TA24
1568952760	WA5
1568952776	MA23
1568952780	TA14
1568952781	TA12
1568952783	TA21
1568952803	TA23
1568952804	TA21
1568952805	TA21
1568952806	TM24
1568952810	WM11
1568952811	MA12
1568952812	TA21
1568952813	WM21
1568952815	WA4
1568952816	TM13
1568952817	WA4
1568952820	WA5
1568952821	TA11
1568952824	MA21
1568952826	P1-P
1568952827	WA5
1568952831	TA13
1568952836	MA14
1568952852	P5-C
1568952857	TA25
1568952869	TA23
1568952870	TM25
1568952871	TA12
1568952872	MA22

1568952874	WM12
1568952883	WM12
1568952884	TA24
1568952888	MA14
1568952892	MM4
1568952893	TM13
1568952894	MA13
1568952896	TM14
1568952897	WA3
1568952898	TA25
1568952901	WM12
1568952905	P1-SW
1568952907	P1-C
1568952919	WM22
1568952938	WM22
1568952941	TM25
1568952942	WM14
1568952959	TA13
1568952963	MA21
1568952965	MA21
1568952969	WM22
1568952971	TA23
1568952973	TM13
1568952974	MA12
1568952980	WA5
1568952982	MA25
1568952985	TM12
1568952986	TA25
1568952989	TM24
1568952992	TA21
1568952995	WM25
1568952996	MA11
1568953000	WM11
1568953001	P1-SP
1568953005	TA23
1568953006	P2-SW
1568953009	WM22
1568953015	TM12
1568953017	TM24
1568953019	TA12
1568953020	WM14
1568953023	WM25
1568953024	TA13
1568953025	WM14
1568953026	MA22

1568953027	TM25
1568953029	MA15
1568953030	MA13
1568953031	MM4
1568953032	WA3
1568953033	WM21
1568953034	MM4
1568953035	TM25
1568953036	TM12
1568953040	TA21
1568953042	WA5
1568953043	P2-E
1568953045	TA11
1568953046	WA5
1568953047	TA11
1568953050	MA15
1568953051	MM5
1568953052	P3-SP
1568953053	WM21
1568953056	TA22
1568953057	TM25
1568953059	MA24
1568953060	TA23
1568953061	WM21
1568953062	TA12
1568953063	MA21
1568953065	MA14
1568953066	TA21
1568953067	TM12
1568953068	MA12
1568953069	TA11
1568953070	MA14
1568953071	MA14
1568953072	TA21
1568953075	TM24
1568953080	WM12
1568953082	WA2
1568953083	MA22
1568953102	P5-SW
1568953108	MA22
1568953123	MM4
1568953124	MA24
1568953126	P1-SP
1568953127	TM11
1568953130	WA2

2005 Conférence Canadienne de génie électrique et informatique

1568953137	P3-SP
1568953149	MM1
1568953151	WA1
1568953152	MM4
1568953155	TA14
1568953157	P5-SP
1568953158	TM13
1568953159	P3-SP
1568953160	MM2
1568953162	P2-SW
1568953163	TA22
1568953164	MA25
1568953165	TM12
1568953169	MA11
1568953178	WM24
1568953179	TM22
1568953180	P1-SW
1568953183	TA21
1568953185	TM22
1568953189	WM21
1568953190	MA14
1568953191	WA2
1568953192	TA11
1568953193	TA25
1568953195	TM11
1568953196	P4-C
1568953199	TA11
1568953200	MA22
1568953202	WA3
1568953203	WA4
1568953204	WM24
1568953205	TM25
1568953206	MA22
1568953207	TA11
1568953213	P1-C
1568953217	MA14
1568953218	WM21
1568953219	MM2
1568953220	TM22
1568953222	MA15
1568953223	MA13
1568953224	WM11
1568953227	MA12
1568953228	WM22
1568953230	TA13

1568953231	P5-E
1568953233	MA11
1568953234	TA25
1568953235	TA22
1568953236	P4-C
1568953244	MM4
1568953246	MA12
1568953247	MA24
1568953248	P1-C
1568953249	TM15
1568953251	WA1
1568953252	WM21
1568953253	WA3
1568953254	WM23
1568953255	WM21
1568953256	WM14
1568953257	WM12
1568953259	TM12
1568953261	MA15
1568953262	TM15
1568953265	TA21
1568953266	MA15
1568953267	MA22
1568953268	MA11
1568953270	WA4
1568953272	MA12
1568953273	MA12
1568953274	TM22
1568953275	TA15
1568953276	TA14
1568953278	TA15
1568953280	TA12
1568953282	WA3
1568953283	WM12
1568953285	WM23
1568953288	P2-C
1568953289	P2-SW
1568953290	MA25
1568953291	TA11
1568953293	WA5
1568953294	MM1
1568953295	MA21
1568953297	TM25
1568953299	MM4
1568953300	TA21

1568953301	TM24
1568953305	WM11
1568953307	MA11
1568953308	WA4
1568953309	TA14
1568953310	P5-C
1568953313	P1-E
1568953314	MA22
1568953315	MA11
1568953317	P5-C
1568953318	TA21
1568953319	P5-C
1568953321	TM14
1568953324	TA24
1568953325	MA22
1568953326	MA21
1568953328	TM15
1568953331	TM12
1568953332	MA15
1568953333	P2-E
1568953334	TM14
1568953335	TM14
1568953337	MM1
1568953339	WM23
1568953340	P1-C
1568953342	WM14
1568953344	MA15
1568953345	TA22
1568953347	WM21
1568953348	MA14
1568953349	TM11
1568953350	WM24
1568953351	WA4
1568953353	TA21
1568953355	TA21
1568953357	TA24
1568953358	WM11
1568953359	WM11
1568953360	WM25
1568953361	MA24
1568953362	MA14
1568953364	WM11
1568953365	MA14
1568953366	WA3
1568953367	TM22

1568953370	TA21
1568953371	P1-C
1568953372	WM14
1568953374	TM14
1568953375	WM21
1568953376	TM15
1568953378	TM13
1568953380	TM13
1568953381	WM11
1568953383	WM14
1568953385	WM21
1568953387	MM5
1568953397	TA24
1568953519	TA24
1568953529	MA12
1568953534	WM13
1568953651	MA12
1568953833	P1-P
1568954680	WM11
1568954681	WM11
1568954846	WM14
1568954853	P2-SW
1568954854	P5-P
1568954855	P5-P
1568954856	P5-P

CCECE 06 Call for Papers

Technology for a Better World

19th Annual Canadian Conference on Electrical and Computer Engineering

May 7 to 10, 2006 - Ottawa Congress Centre, Ottawa, Canada

<http://www.ieee.ca/ccece06/>

The 2006 IEEE Canadian Conference on Electrical and Computer Engineering provides a forum for the presentation of electrical and computer engineering research and development from Canada and around the world. Papers are invited, in French or English, including but not limited to the following topics:

- Advanced Computer Architecture
- Analog & Digital Electronics
- Artificial Intelligence
- Computer Networks and Systems
- Control Theory & Applications
- Digital Signal Processing
- Electronic Circuits and VLSI
- Human-Machine Interactions
- Image & speech Processing
- Instrumentation and Measurement
- MEMS & Nanotechnology
- Neural Networks & Fuzzy Logic
- Pattern Recognition
- Power Systems Reliability
- Real-Time Embedded Systems
- RF & Microwaves
- Remote Sensing, Sensors and Devices
- E-Learning, E-commerce, E-business
- Agent-Based & Internet-Based Systems
- Antennas & EMC/EMI
- Biomedical Engineering & Bioinformatics
- Communications & Wireless Systems
- Database & Data Mining
- Electrical Machines and Drives
- Electromagnetics and HV Engineering
- High-Performance Computing
- Intelligent Systems
- Microelectronics & Optoelectronics
- Mobile & Pervasive Computing
- Optical Systems & Photonics
- Power Electronics
- Robotics & Mechatronics
- Security, Privacy and Trust
- Software Engineering
- Power systems & renewable Energy
- Virtual Reality and New Media

Regular Paper Submission: Please submit a 300-word abstract of your paper to the Technical Program Committee using the on-line submission process on our web site at <http://ieee.ca/ccece06> before December 4th, 2005.

Workshop, Tutorial, and Special Sessions Proposal Submission: Proposals for special sessions, workshops/tutorials must be received by January 20, 2006. Please contact the Workshop / Tutorial Chair at g.m.yee@ieee.org

Student Paper Competition: If the first author is a student for a paper submitted to the conference that paper will be automatically considered for Student Paper Competition.

Important Dates: Paper abstracts must be received by:

Friday, December 4th, 2005

Special Session, tutorial/workshop proposals must be received by:

Friday, January 20th, 2006

Notification of acceptance will be sent out by:

Friday, February 4th, 2006

Registration must be received by:

Monday, February 24th, 2006

Final papers must be received by:

Monday, February 24th, 2006

Industrial Exhibits: Please contact the Sponsor / Exhibit Chair at jasmin.roy@crc.ca for information about industrial exhibits at the conference.