IEEE VANCOUVER CONTACT

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From softwood to software: 100 years of IEEE and Vancouver

Michael Geselowitz
IEEE History Center

Monday 27 June
500pm - 730pm

Room 1400
SFU Harbour Centre
515 West Hastings St
Vancouver

Seats limited - register at
http://bit.ly/mD19pq

Sponsors
IEEE Life Members
IEEE Vancouver

Information
Mazana Armstrong
IEEE Vancouver Chair
mazana.armstrong@ieee.org

Since 1884, IEEE has been fostering innovation. The City of Vancouver was incorporated just two years later, as the arrival of the transcontinental railroad began the transformation of a lumber town into a manufacturing and transportation hub. By 1911, the city's population exceeded 100,000 and the first intrepid group of engineers joined together to form a section of the American Institute of Electrical Engineers (AIEE).

In the past 100 years, the members of AIEE, its sister organization the Institute of Radio Engineers (IRE), and their joint successor IEEE have led the way in the technologies that transformed Vancouver, Canada and the entire 20th century. This talk will review some of this history and suggest ways that the members of IEEE Vancouver can be active participants in preserving and making known their proud heritage.

Speaker: Michael N. Geselowitz is Staff Director of the IEEE History Center. Immediately prior to joining IEEE in 1997, Mike was Group Manager at Eric Marder Associates, a New York market research firm, where he supervised Ph.D. scientists and social scientists undertaking market analyses for Fortune 500 high-tech companies. He is also a registered Patent Agent.

Mike holds S.B. degrees in electrical engineering and in anthropology from the Massachusetts Institute of Technology, and M.A. and Ph.D. degrees in anthropology from Harvard University. His research focus has been on the history and social relations of technology. He has worked as an electronics engineer for the Department of Defense, and he has held teaching and research positions relating to the social study of technology at M.I.T., Harvard, and Yale University, including a stint as Assistant Collections Manager/Curator at Harvard's Peabody Museum of Archaeology and Ethnology

Emily Landry, IEEE Canadian Foundation scholarship winner, will attend this IEEE Vancouver centennial event to receive her award.

More information on centennial celebrations and activities at: http://vancouver.ieee.ca/Centennial

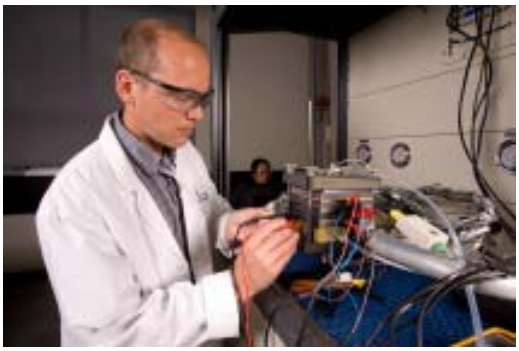
Visit NRC Institute for Fuel Cell Innovation (NRC-IFCI)

Friday 15 July -15:00
RSVP by email to: anewton.ieee@gmail.com by Friday 08 July

Canada's National Research Council (NRC) is a leader in the development of an innovative, knowledge-based economy for Canada through science and technology.

Located in the heart of the Vancouver fuel cell technology cluster, the NRC Institute for Fuel Cell Innovation (NRC-IFCI) supports Canadian leadership in clean energy technology by addressing industry-defined R&D and commercialization priorities.

NRC-IFCI's "living laboratory" for clean energy solutions features state-of-the-art research labs, an Advanced Testing and Validation Centre (ATVC), integrated technology demonstrations, fuel cell electric vehicles and a hydrogen fueling station.



IEEE COMMUNICATIONS SOCIETY

Gordon Dobson-Mack
Powerex

Thursday 23 June

12:30pm to 1:15pm

BC Hydro
Dunsmuir Auditorium
(near Stadium Skytrain Station)
Second Floor
333 Dunsmuir Street
Vancouver, BC

Information
Power and Energy Chair
Glen Tang
glen.tang@ieee.org

Impact of intermittent energy and dynamic transfers on the transmission grid

By December 2010, there was 7,500 MW of wind generation installed in the Northwest Power Pool ("NWPP"). In July 2012, the installed capacity is forecast to grow to 13,500 MW which corresponds to approximately 20% of the NWPP's coincident peak and 40% of its minimum load. A consequence of increased intermittent resources being integrated into the grid is that energy schedules will vary much more than they have in the past. When faced with the challenge of integrating renewable energy, many Balancing Authorities want increased access to dynamically scheduled ancillary services, such as regulation. As a result, several Transmission Providers in the Pacific Northwest have wondered how much variability in power flows can be allowed without jeopardizing system reliability.

In October 2010, a Dynamic Transfer Capability ("DTC") Task Force was convened to determine how the volume of Dynamic Transfers could be increased without compromising system reliability. The Task Force brings transmission planners together from twelve transmission companies across the WECC and its goals include: understand differences in the DTC studies conducted to date; foster technical understanding of the issues associated with DTC limits and develop a common methodology for determining DTC limits.
This presentation will discuss the emerging issue of Dynamic Transfer Capability limits and the work of the DTC Task Force.

Speaker: An Electrical Engineering graduate of Queen's and Ecole Polytechnique, Gordon joined BC Hydro as an EIT in 1990. Currently he works at Powerex - BC Hydro's wholly owned energy marketing subsidiary - as their Transmission Issues Manager and is the Chair of the DTC Task Force. Previously Gordon has worked in Transmission Planning, Transmission Scheduling, Power Supply Operations (PSOSE) and System Operations (SCC). Gordon is a member of the IEEE.

IEEE PES Power & Energy Society

Zhou Wang
University of Waterloo

Monday 27 June
11:00am -12:00pm

ASB9705
Simon Fraser University
Burnaby

Information
Circuits and Systems
joint Vancouver/Victoria
chapter chair
Ljiljana Trajkovic
ljilja@cs.sfu.ca

What makes an image look good? - recent progress on objective image quality assessment

Images are subject to a wide variety of distortions during acquisition, processing, compression, transmission and reproduction. Humans are sensitive to image distortions and can effortlessly identify image distortions. By contrast, objective evaluation of perceived image quality turns out to be a difficult task.

In the past decade, there has been a sudden acceleration in progress and interest in image quality assessment, which, not coincidentally, has corresponded with a rapid rise in interest in digital imaging in general, driven by technological advances and the ubiquity of digital images. The roles of image quality assessment methods are not only to monitor image quality degradations and to benchmark image processing systems, but also to optimize a large number of image processing algorithms and systems. In this talk, we will first give a brief overview of the field of objective image quality assessment. We will then introduce our recent progress on the design of image quality measures and discuss their extended applications beyond quality assessment.

Speaker: Zhou Wang received the Ph.D. degree from The University of Texas at Austin. He is currently an Assistant Professor in the Department of Electrical and Computer Engineering, University of Waterloo. His research interests include image processing, coding, communication, and quality assessment; computational vision and pattern analysis; multimedia coding and communications, and biomedical signal processing. He has more than 90 publications in these fields with more than 6,000 citations.
Dr. Wang has served as an Associate Editor of IEEE Transactions on Image Processing, IEEE Signal Processing Letters, and Pattern Recognition; a Guest Editor of IEEE Journal of Selected Topics in Signal Processing, and EURASIP Journal on Image and Video Processing; and a reviewer for more than 40 international journals. He is a recipient of 2009 IEEE Signal Processing Society Best Paper Award, ICIP 2008 Best Student Paper Award (as senior author), and 2009 Ontario Ministry of Research and Innovation Early Researcher Award.

IEEE CIRCUITS AND SYSTEMS SOCIETY
CAS

Krzysztof Pawlikowski
University of Canterbury

Monday 27 June
4:00 pm to 5:00 pm

Room 1600
SFU Harbour Centre, Van*

Information
Circuits and Systems
joint Vancouver/Victoria
chapter chair
Ljiljana Trajkovic
ljilja@cs.sfu.ca

*ed. 07 June

Quantitative computer simulation as a paradigm of scientific investigations

Advances of computer technology initiated in the twentieth century have resulted in adoption of computer simulation as the most popular tool of performance evaluation studies of such complex stochastic dynamic systems as e.g. modern multimedia telecommunication networks. Such wide-spread reliance on simulation studies raises the question of credibility of results from such studies. This question needs to be answered before computer simulation can be objectively accepted as an independent, self-sufficient paradigm of scientific investigations.

In this talk, having briefly overviewed the main necessary conditions of any trustworthy simulation study conducted for performance evaluation of stochastic dynamic systems, we will focus on simulation studies with on-line output data analysis. The perils and pitfalls of quantitative discrete-event computer simulation will be considered, together with its fast distributed version, known as Multiple Replications in Parallel, implemented in Akaroa2, a unique controller of quantitative stochastic simulation.

Speaker: Dr. Krzysztof Pawlikowski is a Professor in Computer Science & Software Engineering at the University of Canterbury, in Christchurch, New Zealand. He received a Ph.D. degree in Computer Engineering from Gdansk University of Technology, Poland, and worked at that university until February 1983. The author of over 170 journal and conference papers and four books has given invited lectures at over 80 universities and research institutes in Asia, Australia, Europe and North America.

He was the Alexander-von- Humboldt Research Fellow (Germany) in 1983-84 and 1999, and a Visiting Professor at universities in Austria, Australia, Italy, Germany and the USA. His research interests include discrete-event computer simulation, performance modelling of multimedia telecommunication networks, on-line statistical analysis and modelling of teletraffic, and applications of experimental networking facilities.

IEEE CIRCUITS AND SYSTEMS SOCIETY
CAS

2011 IEEE International Geoscience and Remote Sensing Symposium

VANCOUVER 仙台 2011

IGARSS

July 24-29, 2011, Vancouver, Canada

Beyond the Frontiers: Expanding our Knowledge of the World

IGARSS 2011 features the following open-to-the-public events on Thursday, July 28:

Joint JAXA+NASA Display on environment study by remote sensing technology
Located on the Hyperwall at the entrance to the Vancouver Convention Centre, East Building (Canada Place)

Public Poster Display on March 11, 2011 East Japan Earthquake and Tsunami
Thursday, July 28, 1:20pm - 4:00pm
Vancouver Convention Centre, East Building, Exhibition Hall B

Public Lecture by Dr. Shunichi Koshimura (Tohoku University, Sendai, Japan)
"The 2011 Tohoku Earthquake Tsunami Disaster: Its Impact and Lessons"
Thursday, July 28, 5:15pm - 6:00pm
Vancouver Convention Centre, East Building, Meeting Room 1

For local information, contact Prof. Dave Michelson, dmichelson@ieee.org.

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Tourism Vancouver
Capilano Suspension Bridge
Tourism Vancouver / Tom Ryan
Vancouver

http://www.www.igarss11.org

Frank Allgöwer
University of Stuttgart

Distinguished Lecturer

Monday 27 June
2 - 3pm
McLeod 418, UBC

Cosponsors
Robotics and Automation; Systems, Man and Cybernetics

Information
Control Systems chair
Ryozo Nagamune
nagamune@mech.ubc.ca

Nonlinear model predictive control: the past, present and future

During the past decades model predictive control (MPC) has become a preferred control strategy for a large number of industrial processes. The main reasons for this popularity include the ability to explicitly handle constraints and dynamic nonlinearities, plus the possibility to consider multi-variable processes with potentially many manipulated and controlled variables.

After a discussion of the history and impact of MPC, we will give an overview over some system theoretic approaches on how to achieve stability, robustness and optimal performance and we will comment on the numerical challenges and solution approaches for solving the underlying real-time open loop optimal control problems, that have to be solved repeatedly in MPC. With a number of applications we will demonstrate that by using a proper setup and specially tailored optimization methods, even large problems, having hundreds of states, can be controlled efficiently using nonlinear MPC methods. Finally we will briefly highlight some recent developments in MPC and comment about the future of the field.

Speaker: Frank Allgöwer is director of the Institute for Systems Theory and Automatic Control at the University of Stuttgart in Germany. He studied Engineering Cybernetics and Applied Mathematics in Stuttgart and at the University of California at Los Angeles (UCLA) respectively and received his Ph.D. degree from the University of Stuttgart. Prior to his present appointment he held a professorship in the electrical engineering department at ETH Zurich and visiting positions at Caltech, the NASA Ames Research Center, the DuPont Company, the University of California at Santa Barbara and the University of Newcastle in Australia.

Frank's main interests in research and teaching are in the area of systems and control with emphasis on the development of new methods for the analysis and control of nonlinear systems and networks of systems. Of equal importance to the theoretical developments are practical applications and the experimental evaluation of benefits and limitations of the developed methods. Applications span a wide range from mechatronic systems to systems biology.

At present Frank is Editor for the journal Automatica and for the Springer Lecture Notes in Control and Information Sciences series and serves as Associate Editor and on the editorial board of several further journals. He is on the Council of the International Federation of Automatic Control (IFAC), is on the Board of Governors of the IEEE Control System Society (CSS) and is chairman of the International Affairs Committee of IEEE CSS.

Frank received several recognitions for his work including the appointment as IFAC Fellow, the Landeslehrpreis Baden-Württemberg (state teaching award), and the Leibniz prize, which is the most prestigious prize in science and engineering awarded by the German Deutsche Forschungsgemeinschaft (DFG).

CSS IEEE - Control Systems Society

UBC line rapid transit study

Ms. Margaret Wittgens
TransLink

Monday 18 July
7:00pm - 9:00pm

BCIT Burnaby campus
SW3-1750

Information
Joint Communications
Chair Alon Newton
alon.newton@gmail.com

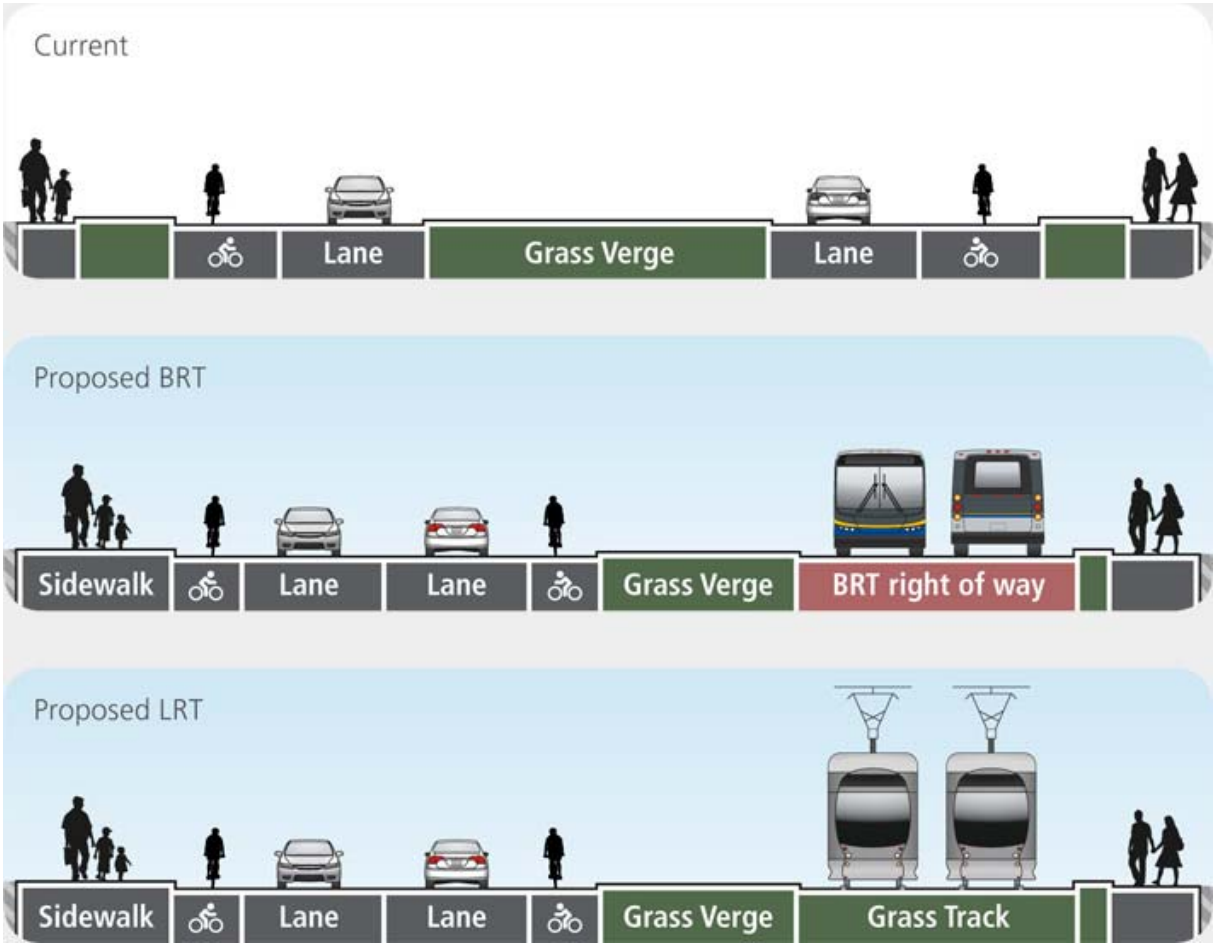
TransLink is leading a multi-phase study to evaluate alternatives for rapid transit in the Broadway corridor between Commercial Drive and the University of British Columbia (UBC).

The Broadway Corridor to UBC is the region's busiest bus corridor. UBC and Central Broadway are the two largest transit destinations in Metro Vancouver, after downtown Vancouver. Bus service is near the limit of what can be provided in a mixed-traffic environment.

The UBC Line Rapid Transit Study is evaluating technology and alignment alternatives for rapid transit which will help support a decision on a preferred rapid transit solution for the corridor. This presentation will describe the approach, process and key findings to date.

Speaker: Margaret Wittgens is the Program Manager for Major Infrastructure Studies and the UBC Line Rapid Transit Project Lead; she has been with TransLink for six years working on a range of transportation projects including the TravelSmart Program, Urban Transportation Showcase Program and rapid transit planning initiatives.
She has a Bachelor of Arts and Science from McMaster University and a Masters in Planning from the University of British Columbia.

For more information: http://www.translink.ca/ubcline



IEEE COMMUNICATIONS SOCIETY

IEEE tutorial on wireless system planning tools

Tuesday 19 July
09:00 - 16:00

Electrical and Computer Engineering MacLeod Building
Room 418
2356 Main Mall, UBC

Sponsored by
TELUS

Pre-registration required: Please contact
Dave Michelson, davem@ece.ubc.ca.

Wireless system planning tools help designers to optimize the coverage of, and reduce the mutual interference between, base stations installed throughout a service area. This short course will open with a survey of the essential features of today's leading wireless access technologies - LTE and WiMAX - with emphasis on the features of these technologies which are most relevant to wireless system planning and optimization.
Next, the short course will shift to methods used to predict wireless coverage from a particular location, including a survey of path loss prediction algorithms used by current planning tools and the digital terrain data upon which they operate. Finally, the short course will survey the largely technology-dependent methods used to increase capacity and reduce interference between base stations. Each of the six thirty-five minute lectures that comprise the short course will be followed by a fifteen-minute open discussion and exercise session

Agenda

09:00-09:10 -	Mentum Overview	12:15-13:15 -	Lunch
09:10-09:25 -	Overview and Objectives	13:15-13:50 -	Wireless Propagation and Geodata II
09:25-10:00 -	Wireless Access Technologies I	13:50-14:05 -	Open Discussion and Exercises
10:00-10:15 -	Open Discussion and Exercises	14:05-14:35 -	Wireless System Planning I
10:15-10:35 -	Break	14:35-14:55 -	Break
10:35-11:10 -	Wireless Access Technologies II	14:55-15:10 -	Open Discussion and Exercises
11:10-11:25 -	Open Discussion and Exercises	15:10-15:45 -	Wireless System Planning II
11:25-12:00 -	Wireless Propagation and Geodata I	15:45-16:00 -	Open Discussion and Exercises
12:00-12:15 -	Open Discussion and Exercises	16:00 -	Wrapup

Presenters

Dr. Yann Le Helloco currently serves as CTO and Head of R&D for Mentum, where he is responsible for R&D and system engineering activities related to planning and optimization of mobile and fixed networks, with emphasis on the Planet and Ellipse products. Dr. Le Helloco joined Mentum from Ericsson in 2007. Prior to that, he held positions of increasing responsibility in the areas of software development, radio wave propagation prediction, UMTS and fixed wireless simulation, radar imagery, and signal processing, and has experience with most air interface technologies and protocols.

Prof. Dave Michelson currently leads the Radio Science Lab in the Department of Electrical and Computer Engineering at UBC where his research efforts focus on antennas and propagation in fixed wireless, industrial and Earth-space environments. He serves as Chair of the IEEE Vehicular Technology Society's Propagation Committee and as theme leader for Information and Communications Technologies of the NSERC Strategic Network on Intelligent Microgrids

IEEE Joint Aerospace and Electromagnetics Chapter

Lunch & Learn
BBQ lunch and factory tour of Enigma Interconnect Inc.

Friday 22 July - Noon
8070 Winston Street Burnaby

Enigma Interconnect is the largest and most sophisticated Canadian manufacturer of bare printed circuit boards west of Ontario and has been making PCB's in Burnaby since 1973.

On Friday July 22nd, Enigma will be hosting a BBQ lunch, net-working function and process tours for all members and friends of the IEEE.

Lunch will start at 12:00 noon that day and the staggered tours will commence in groups of 5 - 10 people per tour-guide at around 1:00.

Please RSVP Alon Newton
by 15 July
anewton.ieee@gmail.com

SFU celebrates IEEE Vancouver centennial

On Wednesday, June 8, 2011, SFU held the IEEE Centennial & Appreciation Day to celebrate 100 years of IEEE Vancouver. It was an event organized jointly by the SFU IEEE student branch and the IEEE Vancouver, and was an unbelievably huge success!

The celebration kicked off with a poster competition where both undergraduate and graduate students showcased their project and research work to attract students and faculty, and was highlighted by the Dean of Applied Sciences, Dr. Nimal Rajapakse, addressing the engineering students about the importance of getting involved with IEEE as student members, and how IEEE can help shape a life-long career for aspiring engineers. The Dean is fully committed to supporting IEEE Vancouver and the student branch, and will be deeply involved in future IEEE events.

Duncan Chan (left) and Mohammad Akhlaghi receiving the IEEE plaque on behalf of the SFU Student Branch

IEEE Vancouver chair, Dr. Mazana Armstrong, also gave a wonderful presentation on IEEE Vancouver in which she highlighted the milestones and accomplishments of the section in the 100 years since its establishment. As well, Amit Plaha of APEG BC, Bob Stewart, Principal Engineer of BC Hydro, and Kouros Goodarzi from IEEE Vancouver also gave speeches to the crowd of over 50 people.

At the end of presentations, Mazana presented the centennial plaque to SFU, and was graciously accepted by our Dean. Meliha Selak, IEEE Vancouver's student activities chair, also presented a student branch plaque to the SFU student branch officers as a token of appreciation for the work that student volunteers have put in to promote IEEE within the university and organize events for fellow students.

After all is said and done, all the attendees enjoyed delicious food and beverages.

Tourism Vancouver recognizes Dave Michelson with 2011 Betty Fata award

Tourism Vancouver has invited Prof. David G. Michelson to accept the "2011 Betty Fata Award for Conference Leadership" on behalf of IEEE Vancouver Section at the Tourism Vancouver Annual General Meeting to be be held on Wednesday, 22 June 2011. The Award recognizes an individual or individuals who have taken the lead in bringing a major conference or event to Greater Vancouver.

During his term as Chair of IEEE Vancouver Section from 2009-10, Prof. Michelson also served as a member of the organizing committees that won the bids to bring IEEE ICUWB 2009, IEEE VTC 2014 Fall and IEEE APS/URSI 2015 to Vancouver. He also strengthened Tourism Vancouver's connections to the worldwide IEEE community by inviting staff members Dorte Ottesen and Kathy Nicholay to become Associate Members of IEEE. Most recently, he has been working with the General Chair of IEEE IGARSS 2011 to facilitate its successful relocation to Vancouver from Sendai, Japan in July 2011 following the catastrophic earthquake and tsunami in the region last March.

Vancouver has attracted an increasing number of IEEE conferences and standards committee meetings during the past twenty years. According to IEEE Vancouver Conferences Chair Eugen Trandafir, "IEEE conferences make a tremendous contribution to the stature of our local academic and engineering communities and to the economy of Metro Vancouver. We'll continue to work with Tourism Vancouver to bring more IEEE conferences to Vancouver in the future."

BCIT student branch placed second and UBC Okanagan student branch placed third in the IEEE Canada student branch website design contest for 2011. Well done!!

Message from the chair

Dear IEEE Member,

I wanted to keep this message short and let the pictures do the talking. We had some great centennial events in the past months, and I would like to especially emphasize the events held at our local universities. Our second centennial history search through paper records preserved over the past 100 years was held on June 4 – an outstanding task and an outstanding effort from our Section volunteers! We also held our third centennial committee meeting in preparation for the upcoming Section centennial events: history event on June 27, celebration event on August 23, and a technical symposium planned for mid October. Please check announcements in this issue of Contact, or visit our website.

See you at the upcoming events!

Mazana Armstrong, Section Chair
IEEE Vancouver

IEEE Centennial event and Project Fair at UBC on April 6

Attendees enjoyed history presentations and speeches by distinguished guests (**Photo 1**). Addresses by centennial industry sponsors (Jim Thomson, Director, BC Hydro Transmission Engineering and Nathan Ozog, APEG BC), were received with a lot of interest. UBC was presented with a centennial plaque acknowledging over 80 years of support to IEEE Vancouver (**Photo 2**: Mazana Armstrong, Section Chair, Andre Ivanov, UBC ECE Department Head). UBC student branch received a plaque stating the historical date when the branch was formed (**Photo 3**: Aryan Navabi, Past UBC SB Chair, Frankie Angai, UBC SB Chair, Meliha Selak, VS Student Coordinator).

IEEE Centennial event and Project Presentations at BCIT on May 18

Attendees were welcomed by Glenn Pellegrin, BCIT student branch coordinator, and Mazana Armstrong, Section Chair. Interesting talks were given to the students by the centennial industry sponsors representatives from BC Hydro, APEG BC and Stantec. On behalf of BCIT, Craig Cowan, Associate Dean, received a centennial plaque acknowledging over 50 years of support to IEEE Vancouver. UBC student branch received a plaque stating the historical date when the branch was formed (**Photo 4**: Koji Otomo, BCIT SB Chair, Nina Selak, IEEE Vancouver TISP Coordinator). **Photo 5**: Kouros Goodarzi, section vice-chair, and BCIT students presenting their project.

IEEE Vancouver Centennial event and poster competition at SFU on June 8

Photo 6: SFU Dean of Applied Science Prof. Rajapakse gave an inspiring talk to the students and guests on the importance and benefits of involvement with IEEE. The welcome address was given by Section Chair, Mazana Armstrong. Centennial sponsor representatives addressed the students on the topic of employment opportunities within the power industry (**Photo 7**: Bob Stewart, BC Hydro principal electrical engineer) and importance of professional engineer designation and membership with APEG BC (Amit Plaha, APEG BC student program coordinator). **Photo 8**: SFU was presented with a centennial plaque acknowledging the many years of support to IEEE Vancouver (Dean Rajapakse, Mazana Armstrong, Mohammad Akhlaghi, SFU SB). SFU student branch received the plaque stating the historical date when the branch was formed. Kouros Goodarzi, Section vice-chair, gave a presentation on the history of IEEE in Vancouver and BC.

2nd Centennial History Search

Centennial history search subcommittee met for the second time at BCIT to screen and scan paper records retrieved earlier this year. **Photo 9**: Steven McClain, Section Secretary, Aiden McClain, Chris Scholefield, Centennial History, William Tigor, BCIT SB, Mazana Armstrong, Section Chair, Jodie Vigar, BCIT SB, Koji Otomo, BCIT SB Chair

Analog and digital hybrid CMOS/memristor circuits as a future computing paradigm

Dmitri Strukov
UCSB

Monday 25 July
4:00 p.m.

Room 2020
Kaiser Building
2332 Main Mall, UBC

I will review recent experimental and theoretical efforts at UCSB towards development of a hybrid circuit paradigm (Fig. 1d) based on a combination of nanodevices and conventional CMOS stack, in particular focusing on analog and digital circuit applications. The key component of hybrid circuits is a resistive switching ("memristive") nanodevice made of a thin layer of a special material sandwiched between two electrodes, e.g., crossbar wires (Figs. 1a, c). By applying electrical bias across electrodes, device resistance can be changed reversibly either in continuous or binary way (Fig. 1a). The resistive state can be retained for a long time, provided that subsequent operation is at smaller biases.

Unlike CMOS transistors, memristive devices have only one critical dimension so that their lateral features might be defined more aggressively using advanced patterning technologies. In addition, because of low temperature fabrication the effective device footprint can be further reduced if multiple crossbar layers are integrated with CMOS (Fig. 1d).

The high integration density of memristive devices is combined with high flexibility, functionality and yield (but lower density) of CMOS devices. As a result, hybrid circuits are especially attractive to implement digital and analog memories, reconfigurable circuits, and bio-inspired information processing. For example, nanodevices would be used to implement density critical functions, i.e. configurable weights in multiply and add circuitry (Fig. 1b), while CMOS circuitry to provide gain and signal restoration, which might be less critical in such applications.

Speaker: Dmitri Strukov is an Assistant Professor in the department of Electrical and Computer Engineering at UC Santa Barbara. In general, his interests are in the physical implementation of computation, including device physics, circuit design, and high-level architecture, with emphasis on emerging device technologies.

He received a M.S. in Applied Physics from the Moscow Institute of Physics and Technology (1999) and a Ph.D. in Electrical Engineering from Stony Brook University in New York (2006). Prior to joining UCSB he was a research associate at Hewlett-Packard Laboratories in Palo Alto, CA working on theoretical aspects of memristive devices and circuits.

Information
Computer Society Chair
Sathish Gopalakrishnan
sathish@ece.ubc.ca

29 Jun - Ed

GROUP ON EARTH OBSERVATIONS

IEEE GEOSS Workshop XLI

Global Water Cycle Interoperability and Field Applications

Place: Vancouver, BC, Canada
Vancouver Convention Center

Time: July 24, 2011 Sunday
8:30am-6:00pm

This one-day workshop will be held prior to the IGARSS symposium. It will bring together the Earth Observation community, modeling, and other water management communities to look at issues of Global Hydrology Interoperability and field Applications and the needs of the community for GEOSS-derived information. The workshop will consist of a series of presentations, breakout sessions and discussions. A report will be written with recommendations for GEOSS.

For more information, refer to the website: http://www.ieee-earth.org/event/geoss-workshop-xli-hydrology or contact the following organizers:

Doug Cripe (dcripe@geosec.org)
Prof. Albin J. Gasiewski (al.gasiewski@colorado.edu);
Prof. Toshio Koike (tkoike@hydra.t.u-tokyo.ac.jp);
Rick Lawford (lawford@umbc.edu);
Francoise Pearlman (jsp@sprintmail.com);
Kim Williams (k.williams@ieee.org)

Organized by:

IEEE NASA IEEE GRSS ICEO IEEE Committee on Earth Observation

2011 IEEE International Geoscience and Remote Sensing Symposium
VANCOUVER 仙台 2011 IGARSS 24-29 July, Vancouver, Canada

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OGC Making location count.