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## Accepted nominations for IEEE Vancouver 2016 elected positions

The Nominations Committee is pleased to announce a slate of candidates for the elected positions within the Vancouver Section. You will note that there are three positions that are listed as vacant. These positions have not yet received confirmation that someone is willing to stand for office. If any of these positions interests you please contact Steven McClain (nominations committee chair) at StevenMcClain@ieee.org to state your interest.

for any positions that are contested as is our usual practice. The Section bylaws call for petitions as follows:

*Following this announcement, a minimum of twenty eight (28) days shall be allowed for additional nominations by petition. A valid petition must be signed by twelve (12) or more voting members or 1% of the Section's voting membership, whichever is fewer.*

Also, if you are interested in a position that is listed as having a nominee you are free to run for that position. We will hold an election

Steven McClain,  
Chair Nominations Committee

Lee Vishloff .....	Chair	Vancouver .....	Section
Rama Vinnakota .....	Vice-Chair	Vancouver .....	Section
Steven McClain .....	Treasurer	Vancouver .....	Section
Ernie Kenward .....	Secretary	Vancouver .....	Section
Youry Khmelevsky .....	Chair	Okanagan .....	Sub-Section
Matthew Reid .....	Chair	Northern BC .....	Sub-Section

Ivan Bajic .....	Chapter Chair	Signal Processing .....	(SP01)
Jeff Bloemink .....	Chapter Chair	Joint Industry Applications and Electronics .....	(IE13/IA34)
Ahmed Hussein .....	Chapter Chair	Joint Applied Physics .....	(IM09/MAG33/NPS05/UFFC20)
Sara Khosravi .....	Chapter Chair	Engineering in Medicine and Biology .....	(EMB18)
Darrell Koskinen .....	Chapter Chair	Joint Management .....	(TM14/PC26/E25/SIT30)
Stephen Makonin .....	Chapter Chair	Joint Computing .....	(C16/CIS11)
Dave Michelson .....	Chapter Chair	Joint Aerospace & Electromagnetics .....	(AES10/GRS29/RL07/PSE43)
Shahriar Mirabbasi .....	Chapter Chair	Joint Solid State Circuits & Technology .....	(SSC37/CE08/CPMT21)
Ryozo Nagamune .....	Chapter Chair	Joint Control, Robotics, and Cybernetics .....	(CS23/RA24/SMC28)
Dipendra Rai .....	Chapter Chair	Joint Power & Energy .....	(PE31/DEI32)
Serdar Soyulu .....	Chapter Chair	Oceans, Geoscience & Remote Sensing .....	(OE22)
Ljiljana Trajkovic .....	Chapter Chair	Joint Section Circuits and Systems .....	(CAS04)
Vincent Wong .....	Chapter Chair	Joint Communications .....	(VT06/COM19/PHO36/BT02/IT12/ITS38)
VACANT .....	Chapter Chair	Electron Devices .....	(ED15)
VACANT .....	Chapter Chair	Power Electronics .....	(PEL35)

Parastoo Kheirkhah Dehkordi .....	Chair	Women In Engineering .....	Affinity Group
Sean Garrity .....	Chair	Young Professionals .....	Affinity Group
Scott Tully .....	Chair	Consultants Network .....	Affinity Group
VACANT .....	Chair	Life Membership .....	Affinity Group



Charles F. Henville  
Henville Consulting Inc.

Monday 30 November  
12:00pm - 1:00pm

BC Hydro  
Edmonds A01 Auditorium  
6911 Southpoint Dr, Bby

**Information**  
Joint Power & Energy Chair  
Rama Vinnakota  
Rama.Vinnakota@bchydro.com



## An out-of-step event in the Peruvian Power System

This presentation describes the analysis of a disturbance in the Peruvian Power System, in which an out-of-step condition between two regions arose and persisted for more than 60 seconds. The interconnected Southern-Western Region and the National Grid were operating at frequencies at up to 5 Hz difference. The presentation includes a theoretical discussion of the phenomenon, and shows how this particular incident was analysed using digital transient recorders. The analysis demonstrated the asynchronous interconnection of the two regions and their subsequent resynchronization after manual generation shedding. The out of step condition resulted in significant voltage swings on the transmission system. We will include a discussion of how remedial action schemes such as the BC Hydro generation shedding schemes prevent such voltage fluctuations.

**Speaker:** Charles (Charlie) Henville earned his BA and MA (in engineering) from Cambridge University,

England, and MEng. from the University of British Columbia. He has worked as a protection engineer for 27 years for a BC Hydro, and since 2005 as principal of his own consulting firm. Charlie is active in the Institute of Electrical and Electronic Engineers (IEEE) especially the Power and Energy Society (PES). He is a past Chair of the Vancouver PES Chapter, and the IEEE Vancouver Section and of several Vancouver Section committees. Has is also a past Chair of the PES Power System Relaying Committee, and is a Fellow of the IEEE.

In addition to his wide ranging skills in modeling power systems and applying and setting protective relays, he is an experienced presenter of technical subjects. He is adjunct faculty at the University of Wisconsin, Madison, Gonzaga University, and the University of British Columbia. Charlie is a registered professional engineer in the provinces of British Columbia, and Alberta, Canada.

### CALL FOR PAPERS

#### **Cybercrime: Linking Research, Policy, and Practice**

The 4th International Conference on Cybercrime and Computer Forensic (ICCCF)

12-14 June 2016

Simon Fraser University

<http://www.apatas.org/icccf/icccf-2016/>

## BlueDBM: a multi-access, distributed flash store for big data analytics



Arvind  
MIT

Monday 30 November

Room 2020 / 2030  
Fred Kaiser Building  
2332 Main Mall, UBC

Refreshments at 3:30  
Presentation at 4pm

### Information

Colleen Brown  
colleenb@ece.ubc.ca

Complex analytics of the vast amount of data collected via social media, cell phones, ubiquitous smart sensors, and satellites is likely to be the biggest economic driver for the IT industry over the next decade. For many “Big Data” applications, the limiting factor in performance is often the transportation of large amount of data from hard disks to where it can be processed, i.e. DRAM. We will present BlueDBM, an architecture for a scalable distributed flash store which is designed to overcome this limitation in two ways. First, the architecture provides a high-performance, high-capacity, scalable random-access storage. It achieves high-throughput by sharing large numbers of flash chips across a low-latency, chip-to-chip backplane network managed by the flash controllers. Second, it permits some computation near the data via a FPGA-based programmable flash controller. We will present the preliminary results on accelerating complex queries

using BlueDBM consisting of 20 nodes and up to 20TB of flash.

**Speaker:** Arvind is the Johnson Professor of Computer Science and Engineering at MIT. Arvind's group, in collaboration with Motorola, built the Monsoon dataflow machines and its associated software in the late eighties. In 2000, Arvind started Sandburst which was sold to Broadcom in 2006. In 2003, Arvind co-founded Bluespec Inc., an EDA company to produce a set of tools for high-level synthesis. In 2001, Dr. R. S. Nikhil and Arvind published the book “Implicit parallel programming in pH”. Arvind's current research focus is on enabling rapid development of embedded systems.

Arvind is a Fellow of IEEE and ACM, and a member of the National Academy of Engineering and the American Academy of Arts and Sciences.



Electrical and  
Computer  
Engineering



Ramprasad Sengupta  
Jawaharlal Nehru University

## Challenges of transitioning from fossil fuel to a green regime of electrical energy in India

The UN has established a Green Fund for the adaptation and mitigation of climate change through pooling resources from the member countries, since the large emitters of GHGs in the developing world like India would require a large investible fund for controlling the extent and the damaging effects of climate change. The challenge is how to ensure the availability of such a fund and its effectiveness in accelerating the transition from fossil fuels to a green energy regime on a global scale.

similar transition from fossil fuels to a green electrical energy regime mobilizing resource rents from big fossil fuel resource-rich countries. With this objective in view, the paper describes an econometric cum spreadsheet-based model of consistency type projection to show how the new renewables can play a major role in accelerating the pace of greening the electrical energy industry of India in the time horizon up to 2031-32 and in meeting the challenges of financing and developing the capability of transition.

Tuesday 01 December  
11:00 - 12:00

Rm 2020 Fred Kaiser  
2332 Main Mall  
UBC, Vancouver

The paper on which this seminar will be based points out at the conceptual level how the capital for the proposed fund can be mobilized, and how the required transition from a high-carbon economy to a low-carbon future can be effected by converting the resource rent from fossil fuels into new assets of renewable energies through investment of the rents, in an "all of the above" energy strategy. It also offers a scalable model for effective international actions in the context of assisting other developing countries in

**Speaker:** Prof. Ramprasad Sengupta is presently visiting the Department of Electrical and Computer Engineering as an International Visiting Research Scholar sponsored by the Peter Wall Institute of Advanced Studies at UBC. He is Professor Emeritus of Economics at the School of Social Sciences of the Jawaharlal Nehru University, New Delhi where he was a Professor of Economics for almost three decades, and held the Sukhamoy Chakravarty Chair of Planning and Development of the University

**Information**  
Colleen Brown  
colleenb@ece.ubc.ca



Electrical and  
Computer  
Engineering



# THE 29TH ANNUAL IEEE CANADIAN CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING

15–18 MAY, 2016 / VANCOUVER, CANADA

*Advancing Society Through Electrical and Computer Engineering*

## **NEW** Important Dates

Tutorial proposals:	December 13, 2015
Invited sessions proposals:	December 27, 2015
Regular paper submission:	December 27, 2015
Acceptance notifications:	February 31, 2016
Camera-ready papers:	March 6, 2016

## — CALL FOR PAPERS —

The 29th Annual IEEE Canadian Conference on Electrical and Computer Engineering (CCECE 2016) will be held in Vancouver, British Columbia, Canada from May 15 to 18, 2016. CCECE is the flagship conference for researchers, students, and professionals in the area of Electrical and Computer Engineering from Canada and around the world to meet annually in a Canadian city to disseminate their research advancements and discoveries, to network and exchange ideas in order to strengthen existing partnerships and foster new collaborations. CCECE 2016 general theme, Advancing Society Through Electrical and Computer Engineering reflects the profound impact of ECE research on our daily lives. CCECE 2016 will address the following many themes which are listed and described to the right. CCECE 2016 will address the following themes:

- ❖ Bioengineering
- ❖ Communications and Networks
- ❖ Computer and Software Techniques
- ❖ Control and Robotics
- ❖ Devices, Circuits, and Systems
- ❖ Power and Energy Circuits and Systems
- ❖ Signal Theory and Signal Processing

Paper submission guidelines and be found on the conference website: <http://ccece2016.ieee.ca>.

## — CALL FOR TUTORIALS —

CCECE 2016 tutorials will be held on Sunday, May 15, 2016. Each tutorial will be 3-hours long. The Organizing Committee invites tutorial proposals across the broad areas of electrical and computer engineering and related fields. Tutorial proposal may involve a single speaker, or a group of speakers, and should include:

1. Title
2. Name(s) and affiliation(s) of the speaker(s)
3. Tutorial summary (two pages maximum), including importance and timeliness of the topic
4. Intended audience
5. Brief description of the materials (slides, code) to be provided to the audience
6. Brief biographies of speakers (300 words maximum), highlighting prior experience in delivering conference tutorials.

Proposals from industry and combined industry-academia proposals are especially encouraged. To submit the proposal, please send via email a PDF document containing the required information by **December 13, 2015**, to the Tutorials Co-Chairs:

Ivan Bajic ([ibajic@sfu.ca](mailto:ibajic@sfu.ca)) and Thomas Johnson ([thomas.johnson@ubc.ca](mailto:thomas.johnson@ubc.ca))



## CALL FOR PAPERS

Please read the following paper submission guidelines before submitting your papers:

- Paper submission deadline is on **January 15, 2016**.
- All papers must be submitted through the IEEE WCCI 2016 online submission system. For special session papers, please select the respective special session title under the list of research topics in the submission system. For papers submitted to the cross-disciplinary and CI applications special sessions track, please click on the IEEE CEC 2016 paper submission link, and in the "Main Research Topic", select the respective special session title under "Section 8. Cross-Disciplinary and CI Applications". Any paper submitted to the cross-disciplinary and CI applications special sessions track (if accepted and presented) will be published in one of the three conference proceedings (IJCNN, Fuzzy-IEEE or IEEE CEC) that is most fitting. Such decision will be made by the Special Session Organizers in consultation with the Special Session Chair and one of the three Conference Chairs.
- In order for your papers to be included in the congress program and the proceedings, final accepted papers must be submitted and the corresponding registration fees must be paid by April 15, 2016.
- IEEE WCCI 2016 will present the Best Overall Paper Awards and the Best Student Paper Awards to recognize outstanding papers published in each of the three conference proceedings (IJCNN 2016, FUZZ-IEEE 2016, IEEE CEC 2016). The awards will be judged by an Awards Committee and the recipient of each award will be given a certificate of the award and a cash prize to be presented during the conference banquet at IEEE WCCI 2016.

If you encounter any problems with the submission of your papers, please contact the Paper Submission Chair Dr. Ke Tang.

- Submit papers to IJCNN 2016: <http://ieee-cis.org/conferences/ijcnn2016/upload.php>
- Submit papers to FUZZ-IEEE 2016: <http://ieee-cis.org/conferences/fuzzieee2016/upload.php>
- Submit papers to IEEE CEC 2016\*: <http://ieee-cis.org/conferences/cec2016/upload.php>

\* For papers submitted to the cross-disciplinary and CI applications special sessions track, please click on the IEEE CEC 2016 paper submission link.

**LaTeX and Word Templates.** To help ensure correct formatting, please use the style files for U.S. Letter as template for your submission. [These include LaTeX and Word](#). Violations of any of the above paper specifications may result in rejection of your paper.

**Manuscript Style Information.** Only papers prepared in PDF format will be accepted. Paper Length: Up to 8 pages, including figures, tables and references. At maximum, two additional pages are permitted with overlength page charge of US\$125/page, to be paid during author registration. Paper Formatting: double column, single spaced, #10 point Times Roman font. Margins: Left, Right, and Bottom: 0.75" (19mm). The top margin must be 0.75" (19 mm), except for the title page where it must be 1" (25 mm). No page numbers please. We will insert the page numbers for you.

**Note:** Violations of any of the above specifications may result in rejection of your paper.

<http://www.wcci2016.org>