Welcome to a new year of IEEE activities in Vancouver. I am Rama Vinnakota, your chair for the year 2017. I look forward to working with many of our volunteers who collectively work to provide you with events that help you advance your career and professional objectives. These dedicated volunteers support 1900 plus local members and many non-members. I sincerely request any of the members thinking of volunteering to come forward right away. Volunteering is not only self-fulfilling but you also develop skills at a very low risk to your professional career. Your Section reported 114 events during 2016 organized by volunteers.

Get involved - learn, network and give back to the profession The backbone of the Vancouver organization is our many Technical Chapters who provide technical lectures and seminars in emerging areas that are industry specific. Attending these technical presentations is an easy way to keep your professional skills up to date and deepens your ties to others who work in your area. This networking opportunity can prove invaluable when later recruiting or looking for a new job. Experienced members are encouraged to give back to the profession by sharing their technical expertise with other young professionals on their own or when approached by the Technical Chapter and affinity groups. If you have any specific topic of interest feel free to contact me or your society local representative, I will ensure necessary arrangements are made to organize such events. Encourage non-members to attend the technical presentations and circulate IEEE Vancouver Contact to perceive value provided by IEEE to your profession.

Advance your career at upcoming conferences and tutorials in Vancouver. IEEE Technical Societies sponsor a huge number of conferences and events globally each year (1800). For 2017 there are currently three IEEE conferences planned for Vancouver. Stay tuned for more news.

• 2017 IEEE International Conference on Cloud Engineering (IC2E)
• 2017 26th IEEE International Conference on Computer Communication and Networks (ICCCN)
• 2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)

In our rapidly changing industry staying current is an important part of career planning. Typically during these conferences several tutorials will be organized. By attending these in your technical area, your organization would potentially save several dollars instead of sending you away for training to far off places.

I look forward to see you at one of our events including the Annual General Meeting on 25 March 2017. If you have ideas and suggestions to make IEEE Vancouver Section more valuable to the professional community please send a note to vvramkri@IEEE.org. I wish you a successful 2017.

Best regards, Rama Vinnakota M.Tech, MAM, P.Eng Chair - IEEE Vancouver Section
In recent years, the analysis and synthesis of net-
worked control systems (NCSs) have received
increasing attention from both scientific and indus-
trial communities. Compared with traditional
point-to-point control systems, the main advantages
of NCSs come from their low cost, their flexibility and
easy re-configurability, their natural reliability and
robustness to failure, and their adaptation capability.
Consequently, NCSs have been finding applications
in a broad range of areas such as power grids, water
distribution networks, transportation networks,
haptics collaboration over the Internet, mobile sensor
networks, and so on. However, the introduction of
communication channels in the control loop also
brings some network-induced critical issues or con-
straints such as variable transmission delays, data
packet dropouts, packet disorder, quantization er-
rors, etc., which would significantly degrade the
system performance or even destabilize the system
in certain conditions.

This talk will first introduce some elegant approaches
to network-based control and estimation problems. Then, a novel two-layer network-based architecture
for operational control of industrial processes will be
discussed. It will be shown that under the proposed
framework, the overall optimal operational control of
networked industrial processes can be achieved.

Speaker: Huijun Gao received his Ph.D. degree in
control science and engineering from Harbin Institute
of Technology, China, in 2005. He was a Research
Associate with the Department of Mechanical Engi-
neering, The University of Hong Kong, from November
2003 to August 2004. From October 2005 to October
2007, he carried out his postdoctoral research with the
Department of Electrical and Computer Engineering,
University of Alberta, Canada. Since November 2004,
he has been with Harbin Institute of Technology, where
he is currently a Professor and director of the Re-
search Institute of Intelligent Control and Systems.

Prof. Gao’s research interests include network-based
control, robust control/filtering theory and their engi-neering applications. He is an IEEE Fellow and received
the IES David Irwin Early Career Award. He is Co-
Editor-in-Chief of IEEE Transactions on Industrial
Electronics and Associate Editor of Automatica, IEEE
Transactions on Control Systems Technology, IEEE
Transactions on Cybernetics, IEEE/ASME Transac-
tions on Mechatronics etc. Prof. Gao is an IEEE
Industrial Electronics Society (IES) Administration
Committee (AdCom) member.

He is a Thomson Reuters Highly Cited Researcher and
was listed among the top 17 scholars in “The World’s
Most Influential Scientific Minds” by Thomson Reuters,
2014.

Please register at: https://events.vtools.ieee.org/meeting_registration/register/43191
Basic tips and tricks for data visualization

Whether you are writing a paper, designing a poster, giving a talk, or writing a report, effective data visualizing is key. It is easy to be distracted by the large amounts of data and statistical results, leading one to overlook the importance of the figures that represent your data. This talk will help you communicate your message more accurately and effectively. Through the use of real-life examples, you will learn ways to improve visualization of your charts, creating more accessible and understandable visuals. Dr. Elgendi’s interactive and conversational workshop style creates an easy-to-remember learning environment. Attendees will learn Dr. Elgendi’s tips and tricks that he has harnessed over the years, leaving you with a new perspective on visualizations in this upbeat and engaging workshop.

This workshop will include:
- what is data visualization?
- essential attributes to data visualization
- case studies…what not to do
- perspectives of data visualization

WHO SHOULD ATTEND This workshop is ideal for staff, students, fellows, or managers in a wide range of disciplines with an interest in the visual presentation of data. No programming experience or specific software experience is necessary.

Speaker: Dr. Mohamed Elgendi is a senior IEEE member and currently a Mining for Miracles Postdoctoral Fellow at the University of British Columbia in Vancouver, Canada. In addition to his 10+ years of experience in the field of data analysis, he received training on Big Data Analysis and Leadership in Education from MIT. Elgendi’s experience in the area of data analysis and visualization includes his work in Global Health with the PRE-EMPT Initiative (funded by the Bill and Melinda Gates Foundation), and at the Institute for Media Innovation at Nanayang Technological University (Singapore). Elgendi specializes in bridging the areas of engineering, computer science, psychology, neuroscience and medicine for knowledge translation.

Email: moe.elgendi@gmail.com
Address: Department of Electrical and Computer Engineering, University of British Columbia, Vancouver, Canada

Please register at: https://events.vtools.ieee.org/meeting_registration/register/43472
IEEE Think Engineering is an annual networking event hosted by UBC, SFU, and BCIT.

We expect over 250 guests with industry representatives from a variety of companies such as Intel, Teradici, MDA, and Telus.

Our aim is to connect engineering students with industry representatives.

It features multiple networking sessions for students to chat with company representatives, a three course sit down dinner, and a panel discussion of representatives from our top sponsors to share their experience and knowledge.

Please contact nicole.cheang@ieee.org if you are interested in purchasing tickets or sponsoring this event.

Sheraton Wall Centre Pavilion ballroom
(1088 Burrard St Vancouver)
Friday 03 February 5:00pm
**Brewing process tour**
Join us for a tour of Red Truck Brewing in Mount Pleasant. On this tour you'll learn not only how to brew beer at commercial scale, but also about the control systems and instrumentation used to ensure great tasting beer. Afterwards we will retire to the tasting room to try some of those tasty brews.

**Wednesday 8 February at 2:30 pm**
Red Truck Beer Company
295 East 1st Avenue, Vancouver

https://www.eventbrite.com/e/red-truck-brewing-process-tour-tickets-31299950996?aff=EmailYPTeam

**Information**
Serdar Soylu, Chair
IEEE youngprofessionals
serdar.soylu@cellula.com

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**RC CLASSIC IV**
The IEEE BCIT Student chapter is hosting an event coming up on Tuesday 28 February and are looking to include all local universities and colleges. It is formally called the RC Classic and consists of teams of 2-5 building a Remote Controlled Electric Car from scratch to race in a time trial, and compete in three versatility challenges for the title of Grand Campion. We have received sponsorship from a few local companies so I can guarantee there will be some great prizes for competitors. This event has been building from previous years and we are looking to expand our outreach to more and more schools. Last year I believe we only had one team from SFU.

Therefore, I am hoping you all can share this event with your students, colleagues and fellow classmates in hope that we can expand this unique event from BCIT to the Lower Mainland.

For complete competition details please refer to http://www.ieeebcit.org/rc-classic/ and make sure to join the Facebook group https://www.facebook.com/groups/rcclassic/ to stay up to date with all the contest details.
Alex Tivy / Vice Chair - RC Classic
Alex.W.Tivy@ieee.org / 604-220-1914

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Serdar informs us that he’s planning a March event at Cellula Robotics where this marvelous machine / device / robot will be explained in great detail. **Watch for it in March**

Meanwhile, you can have a sneak preview at http://www.cellula.com/cetor3000-plankton-sampler/

**Thanks for the advance notice, Serdar!**