IEEE VANCOUVER CONTACT

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- **A Conversation with Donald Knuth**

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- **Field robotics and assistive robotic systems**

- **Millimeter-wave and terahertz integrated circuits**

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- **High-Resolution time-to-digital converter**

- **IEEE Vancouver 2015 AGM**

- **Kwantlen celebrates new IEEE Student Branch**

Connections and Cocktails — IEEE Young Professionals of Vancouver

Join us on April 30th at Yagger's Downtown Restaurant for an evening of networking and making connections. The IEEE Young Professionals group of Vancouver is hosting an evening that will bring together our local community of early career professionals. You can expect to meet students and professionals from a variety of sectors including consulting, utilities, and marine technology.

The Young Professionals section of IEEE is focused on empowering early career technical professionals with the connections, training and credentials necessary to contribute to the STEM community. We achieve this through skill building seminars, networking evenings, and technical talks. If you can't make it out to this month's event, we will be hosting another networking social on Wednesday, May 27th.

Thursday 30 April
5:30 PM to 10:00 PM (PST)
Yagger's Downtown Restaurant
433 West Pender Street, Vancouver

To register, click here
http://linkedin.us10.list-manage.com/track/click?u=574ca81253223863f80d3f3ea&id=72fe5ba8e1&e=375b12e347

For more information and to stay up to date with IEEE YP, you can follow us on LinkedIn and Facebook
http://linkedin.us10.list-manage.com/track/click?u=574ca81253223863f80d3f3ea&id=59e41ca264&e=8ce60cc817
http://linkedin.us10.list-manage.com/track/click?u=574ca81253223863f80d3f3ea&id=5a93f23192&e=8ce60cc817

5G Evolution and candidate technologies

Rath Vannithamby
Intel Labs

Distinguished Lecturer

ALERT

New time and place

**Wednesday 20 May
4 pm**

**Rm 418 Macleod Bldg
2356 Main Mall, UBC**

Everyone is welcome!

As 4G standards have completed and networks are beginning to be deployed, the attention of the mobile research community is shifting towards what will be the next set of innovations in wireless communication technologies. Given a historical 10-year cycle for every generation of cellular advancement, it is expected that networks with 5G technologies will be deployed around 2020. Technologies for future cellular wireless networks and devices are expected to meet the needs of an increasingly diverse set of devices and services in 5G.

In this presentation, I will discuss the usages and technologies that will comprise the next set of cellular advancements in 5G. In particular, I will discuss a) the applications and usages for future 5G communications, b) a set of key metrics for these usages and their corresponding target requirements, and c) the potential network architectures and enabling technologies to meet 5G requirements. It is expected that some of the new technologies comprising 5G will be evolutionary, covering gaps and enhancements from 4G systems, while some other technologies will be disruptive. These technologies will encompass the end-to-end wireless system: from wireless network infrastructure to spectrum availability to device innovations.

I will also provide an overview of 5G activities around the world to understand the vision and research direction of various teams as they tackle the challenging problems of capacity, massive number of IoT devices, ultra-low latency, ultra-low power efficiency, etc. that wireless networks are expected to face beyond 2020.

Speaker: Rath Vannithamby received his BS, MS, and PhD degrees in EE from the University of Toronto. He leads a team responsible for 5G and Internet of Things research in Intel Labs. Previously, he was a researcher at Ericsson.

He is a Senior Member of IEEE. He is an IEEE Communications Society Distinguished Lecturer. He has published over 50 journal/conference papers and has over 150 patents granted/pending. He is a co-editor of a couple of books "Towards 5G: Applications, Requirements and Candidate Technologies" by Wiley and "Design and Deployment of Small Cell Networks" by Cambridge Press, in production. He has also authored chapters of 3 books. Dr. Vannithamby has given keynote speeches in IEEE APWiMob'14, IEEE ISTT'14, and IEEE GC'10 Broadband Wireless Access workshop.

He is currently an associate editor for two journals: (i) Journal of IEEE Communications Surveys and Tutorials, and (ii) IEEE Internet of Things Journal. He was a lead-chair for workshops on (i) "5G Technologies" and (ii) "M2M Communications for IoT" in IEEE ICC 2014. He is a co-chair for Industry Forum and Exhibits in IEEE GC'15. He was a Guest Editor for EURASIP JWCN SI on RRM for 3G+ Systems. He was a TPC track-chair for PIMRC'11. He has also served on TPC for IEEE ICC, GC, VTC, WCNC, and PIMRC.

His research interests are in the area of 5G, M2M Communications for IoT, energy efficiency, low-latency, QoS for mobile internet applications, cross-layer techniques.

Information
Joint Communications
Chair Vincent Wong
vincentw@ece.ubc.ca

Jt. Chapter BT-02/COM-19/IT-12/ITS-38/PHO-36/VT-06

IEEE Okanagan Subsection
Presents

Prof. Mohamed-Slim Alouini

Computer, Electrical, and Mathematical Science and Engineering (CEMSE) Division King Abdullah University of Science and Technology (KAUST) Thuwal, Makkah Province, Saudi Arabia.

Addressing Spectrum Scarcity through Optical Wireless Communications

Time & Date: 10:30 am – 11:30 am, May 14, 2015
Location: EME 2141, UBC, Okanagan Campus, Kelowna, BC

Talk Abstract: Rapid increase in the use of wireless services over the last two decades has led the problem of the radio-frequency (RF) spectrum exhaustion. More specifically, due to this RF spectrum scarcity, additional RF bandwidth allocation, as utilized in the recent past, is not anymore a viable solution to fulfill the demand for more wireless applications and higher data rates. The talk goes first over the potential offered by optical wireless communications to relieve spectrum scarcity. It then summarizes some of the challenges that need to be surpassed before such kind of systems can be massively deployed. Finally the talk offers an overview of some of the recent results for the determination of the capacity of optical wireless channels.

Speaker Biography: Mohamed-Slim Alouini (S'94, M'98, SM'03, F'09) was born in Tunis, Tunisia. He received the Ph.D. degree in Electrical Engineering from the California Institute of Technology (Caltech), Pasadena, CA, USA, in 1998. He served as a faculty member in the University of Minnesota, Minneapolis, MN, USA, then in the Texas A&M University at Qatar, Education City, Doha, Qatar before joining King Abdullah University of Science and Technology (KAUST), Thuwal, Makkah Province, Saudi Arabia as a Professor of Electrical Engineering in 2009. His current research interests include the modeling, design, and performance analysis of wireless communication systems.

Refreshments will be provided. For further information please contact:
Julian Cheng (email: Julian.Cheng at ubc.ca). Registration Page: (http://is.gd/cjHW94)

IEEE Okanagan Subsection
Presents

Scott McMillan
XCo Tech Inc., Software and Sensor Innovation
British Columbia, Canada

Exact Positioning Systems using Ultrawideband Technology

Time & Date: 5 pm – 6 pm, April 27th, 2015
Location: E103, Okanagan College, 1000 KLO Rd, Kelowna, BC V1Y4X8

Talk Abstract: XCo has developed Gauge, the first performance wearable to precisely measure your location, speed and acceleration. Built for sport and healthcare applications, it is the first wearable to fully integrate precise movement metrics with other body sensor data such as heart rate monitors and concussion sensors. This is made possible by combining XCo's proprietary real-time software with our breakthroughs in cost-effective ultra-wideband positioning and data telemetry technology. The patent pending system is capable of determining location of a person or asset down to a few centimeters both indoors and outdoors. It has overcome the inability of GPS, video, WiFi and other RF based systems to track movements precisely and reliably. More importantly, XCo has achieved this level of performance at a fraction of the cost of other sport and asset tracking systems. Sport teams, facilities and athletes are the first target market for Gauge. Using this system, which includes tracking stations, wearable devices and software, athletes and teams can attain a competitive edge in their training without taking unnecessary risks of injury or illness. Performance data is displayed in real time to anyone, anywhere and may be used to monitor workload, technique, tactics and to minimize injuries. A healthy ROI may be achieved by facilities and other service providers who have purchased a system. Using the same technology platform, XCo is developing equally powerful products for the healthcare industry, in particular, remote patient monitoring. Positional information combined with clinical vital signs provides new value and safety features to in-home, assisted living and hospital tracking systems. Based in British Columbia, XCo's founding team has deep experience in the sports, healthcare and information technology sectors.

Speaker Biography: Scott has a Master of Science degree in Exercise and Sport Science. Specializing in biomechanics, the study of human kinetics and kinematics, he has been using sensor technology for over 20 years to analyze human movement and performance. Prior to founding his own companies (Factor 9 Coaching, Blur Sports Inc and now XCo), he worked for the Adidas Innovation Team. At Adidas, he spent six years working across the company to bring new ideas to market. He has worked with and developed many sensor based products through all stages of innovation and commercialization.

Refreshments will be provided. For further information please contact:
Youry Khmelevsky (email: youry at ieee.org). Registration Page: (will be added)

A Conversation with Donald Knuth
A UBC CS Distinguished Lecture

Donald E. Knuth
Stanford University

Wednesday 17 June
5:00-6:30pm

UBC Point Grey Campus
(venue TBA)

Host: Holger Hoos
UBC Computer Science
Important Note:
Knuth's presentations
tend to draw a large
audience, and the
number of seats available
for this event is limited by
room capacity.

Attendance is free, but
admission will be granted
on a first-come-first-
served basis.

The UBC Department of Computer Science is happy to announce a special event with Donald E. Knuth (professor emeritus at Stanford University, USA), one of the most influential pioneers in computer science history. His multivolume work "The Art of Computer Programming" is regarded as one of the seminal and most comprehensive compendiums in the area of computer programming and has been periodically updated ever since the publication of the first volume in 1968. Knuth also exerted significant influence on the publications in the technical and mathematical sciences through the creation of the typesetting system TeX. This system has rendered the layouting process of scientific works considerably easier and has thus become indispensable.

Instead of a traditional lecture, Knuth invites his audience to an "All questions answered" event, where questions regarding any kind of topic may be posed by the attendees. He cites the famous physicist Richard Feynman as his inspiration for this approach. Feynman was in the habit of holding the last lecture of each of his university courses as an open session, where his students could take the opportunity to ask him anything they wished.

Knuth's influential contributions to the foundations of theoretical computer science have earned him many prizes, such as the Turing Award, the highest distinction in the field (often labeled as the Nobel Prize of computer science). Apart from his scientific work, Knuth helped shape the nomenclature of computer science, thus contributing significantly to increased clarity and unambiguity in computer science literature. More information about Donald Knuth can be found on his webpage.

The DLS series is sponsored in part by the Pacific Institute for the Mathematical Sciences For more information, see: www.cs.ubc.ca/dls

RSVP by April 26 at one of the following links:
If you are a member of UBC Computer Science, RSVP at:
https://my.cs.ubc.ca/event/2015/06/conversation-donald-knuth/
If you a non-member of UBC Computer Science, RSVP at:
https://www.cs.ubc.ca/event/2015/06/conversation-donald-knuth
Printout of your confirmation email needs to be shown at the door; those without this may not be able to attend the event. We will attempt to accommodate as large an audience as possible.

16th ACM/IFIP/USENIX International Middleware Conference
Vancouver 8-11 December 2015
http://2015.middleware-conference.org/
CALL FOR PAPERS

IMPORTANT DATES
May 15, 2015 - Abstract Submission
May 20, 2015 - Paper Submission
August 3, 2015 - Notification of Acceptance
September 7, 2015 - Camera-ready paper due
December 8-11, 2015 - Conference

The annual ACM/IFIP/USENIX Middleware conference is a major forum for the discussion of innovations and recent advances in the design, construction and use of middleware systems. The scope of the conference is the design, implementation, deployment, and evaluation of distributed system platforms and architectures for computing, storage, and communication environments. Highlights of the conference will include a high quality single-track technical program, invited speakers, an industrial track, panel discussions involving academic and industry leaders, poster and demonstration presentations, a doctoral symposium, and workshops.

Serge Haroche
College de France, Paris
Nobel Laureate 2012

To learn more visit his webpage
http://www.college-de-france.fr/
site/en-serge-haroche/

Additional resources for this talk
will be available after the talks.
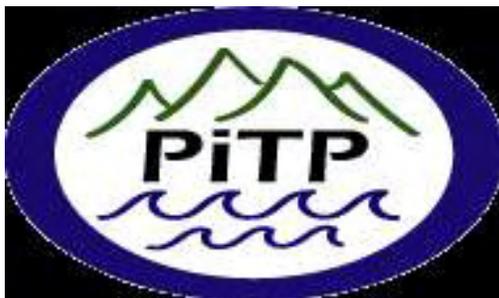
Pacific Institute of Theoretical Physics

Photons in a box and 'Schrodinger Cats' of light

Serge Haroche
College de France, Paris
Nobel Laureate 2012

Thursday 30 April   7:30 pm
Hebb theatre
2045 East Mall, UBC

Free
Open
to the
public

The founders of quantum physics used to analyse "thought experiments", to discuss state superposition, complementarity and entanglement. They imagined manipulating single particles, such as electrons, atoms or photons; they would be surprised to see that experiments with isolated atoms, molecules or photons are now carried on in many laboratories throughout the world. In our Cavity Quantum Electrodynamics (CQED) studies, we stabilize and count photon number states in the cavity. We also prepare and reconstruct photonic superposition states suspended between different 'classical realities', generating a laboratory version of Schrodinger famous 'Cat', which he had imagined to be simultaneously dead and alive. We have also investigated the decoherence process, which explains the transition between the quantum and the classical worlds. CQED physics has recently been extended to artificial 'atoms' made from superconductors, in a new domain of mesoscopic physics called "Circuit QED". This development opens the way to applications in quantum information science.

Reflections on blue sky research

Friday 01 May — 7:30pm
Buchanan room A201
1866 Main Mall, UBC

Free
Open
to the
public

Mankind has always been fascinated by fundamental questions about the Universe and our place in it. This has led to the development of curiosity-driven research, whose successes are among the jewels of our civilized world. There is indeed an aesthetic truth in a scientific theory, comparable to the gratuitous beauty of a piece of art. In addition, basic science is essential to the development of new technologies. I will show that the knowledge accumulated by the fundamental approach to science has led, often in unpredictable ways, to practical applications which have revolutionized our daily lives. I will also reflect on the dangers blue sky research faces in our uncertain global world and explain why it is essential to protect it and to make it thrive, in spite of the present economic difficulties.

IEEE VANCOUVER WINDOWS 10 HACKATHON

Register Now @ https://meetings.vtools.ieee.org/m/33577

Event Location:

Simon Fraser University
Burnaby Mountain Campus
TASC1 Building
Room 9204 E/W

Event Date & Times:

May 16–17, 2015
Starts Saturday @ 9:00am
Ends Sunday @ 1:00pm

Event Sponsors:

IEEE computer society

IEEE VANCOUVER SECTION

Microsoft

SFU

The IEEE Vancouver Joint Computing Chapter, SFU Faculty of Applied Sciences, and Microsoft are excited to announce our next hackathon.

Come hack a Windows 10 universal app together in solo or in a team of 3 people. Don't have a team? You can join one after project ideas are pitched. Pitch your idea and get others to join you. Your hack can be any type of Windows 10 app except games.

Please, bring own devices (laptop, Surface 2, etc.) with the latest public Windows 10 Technical Preview build and Visual Studio 2015 to build Windows 10 apps. If you cannot install Windows 10 on your own PC, there will be a very limited number of Surface 2 devices that we can loan out. Government issued picture ID is required for loaning out a device.

Each team will be given a chance to demo their app to other participants and a panel of judges. Judges will score each app on the following criteria: UAP implementation, platform integration, store availability, and the app idea.

The top 3 teams will be given a prize. Prizes are:

1st Place: Surface 3 Pro

2nd Place: XBox One

3rd Place: Nokia Lumia 635

Prizes are subject to availability and may change without notice. Each team member will receive a prize provided there are no more than 3 team members.

Registration opens April 27 at 11:00am sharp to the **first 50 people** who register. Click on the URL above or scan the QR Code below to go to the registration website. Registration fee is:

- $20 (regular) or
- $10 for students (student ID required).

Your registration fee will help cover the cost of food. Main meals and snacks will be provided throughout the event.

Go to the registration website for more details.

Field robotics and assistive robotic systems in industrial applications

Dikai Liu
U of Technology Sydney

Monday 25 May

11am-noon

Room: Kaiser 2020

UBC

Sponsored by the joint chapters of IEEE Control Systems, Robotics and Automation, and Systems, Man and Cybernetics socities

Current applications of robotics is distinguished from more traditional automation by the focus on robots that operate in relatively unstructured, dynamic, difficult and often hazardous environments. Over the past decade, a number of robotic systems have been deployed in highly challenging application areas including infrastructure maintenance, mining, cargo handling and healthcare. The first part of this presentation will focus on a range of autonomous robotic systems developed at the Centre for Autonomous Systems at the University of Technology Sydney, Australia. Key elements of these systems ranging from perception, mapping, control to learning will be described.

Advances in computing, sensing, actuation, mechanism design, control and machine learning have opened up the potential to build mobile manipulators that can coexist and cooperate with humans. Recent research has demonstrated the significant challenges that need to be overcome in order to make a robot effectively cooperate with a human, in contrast to building an autonomous robot that operates on its own. The second half of this talk will discuss a new assistance-as-needed paradigm for physical human-robot interaction and strength augmentation. It will present the research that uses an optimization approach with a musculoskeletal model to estimate the physical capabilities of a human worker, accounting for limb dynamics and external force interactions. Methods, advantages and limitations of implementing the musculoskeletal model-based assistance-as-needed paradigm will also be discussed.

Speaker: Professor Dikai Liu is Co-Director of the Centre for Autonomous Systems (www.cas.uts.edu.au) at the University of Technology Sydney (UTS), Australia. His main research interest is robotics including navigation, exploration, robot teams and physical human-robot interaction. He has developed many robotic systems for practical applications, including autonomous robots for steel structure maintenance, bio-inspired autonomous climbing robots for complex structure inspection, and assistive robots for augmenting human strength in industrial applications. Since 2005, his research has received three best paper awards (ISARC'2007, ISARC'2006, ISSNIP'2011-Biomedical Sensing and Sensors Symposium) and one best paper award nomination from international conferences; won five national and university awards (two EEAS'2013, 2012 UTS VC's Award for Research Excellence, 2006 Carrick Australia Citation for teaching, 2005 UTS Teaching Award); and been in finalists of four international and national awards (2013 IEEE/IFR IERA Award, 2013 AEEA, 2013 Australian Museum Eureka Prize, and 2005 AAEE). He is the recipient of three Australian patents. Dikai Liu received his PhD in 1997 from the Wuhan University of Technology, China.

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CS/RA/SMC
Joint chapter Chair
Ryozo Nagamune
nagamune@mech.ubc.ca

Systems, Man, & Cybernetics Society

CSS | IEEE Control Systems Society

RA | Robotics & Automation Society

High-Resolution time-to-digital converter using time-domain arithmetic circuits and health-care sensors for non-electrical vital sign monitoring

SeongHwan Cho
Korea Advanced Institute
(KAIST)

Distinguished Lecturer

Tuesday 19 May

18:00 to 19:15

Rm 2020, Kaiser Building
2332 Main Mall, UBC
Vancouver

In the first part of the talk, time-domain processing of analog signals will be described. As information in time-domain signals are conveyed in time and not in voltage, time-domain circuits can benefit from fast switching speeds of advanced CMOS process and can use digital logic gates for analog signal processing. By using time-domain arithmetic circuits such as time-adder, time-amplifier, and time-register, different types of energy-efficient TDCs are implemented such as two-step and pipelined TDCs. Results of prototype ICs in 65nm will be shown.

In the second part of the talk, all-electrical sensors that are capable of monitoring non-electrical vital signs such as pulse wave velocity (PWV) and respiration will be described. By employing bio-impedance technique with analog-modulated body-channel communication (BCC), a wire-free measurement of vital signs can be obtained. Prototype chip fabricated in 0.11um CMOS process consists of ECG/BI sensor and BCC transceiver that monitors PWV, heart rate and respiration.

Speaker: SeongHwan Cho received the B.S. degree in electrical engineering from KAIST, Korea, in 1995, and the S.M. and Ph.D. degrees in EECS from MIT, Cambridge, MA, in 1997 and 2002, respectively. In 2002, he joined Engim, Inc., where he was involved in data converters and phased-locked loop (PLL) design for IEEE 802.11abg WLANs. Since 2004, he has been with KAIST in the department of EE, where he is now a professor. His research interests include analog and mixed-signal circuits for low power communication systems, health-care devices and CMOS sensors. Prof. Cho was the co-recipient of the 2009 IEEE Trans. on Circuits and System Society Guillemin-Cauer Best Paper Award and 2012 ISSCC Takuo Sugano Award for Outstanding Far-East Paper. Prof. Cho has served on the Technical Program Committee on several IEEE conferences, including ISSCC, Symp. on VLSI and A-SSCC. He has served as associate editor of IEEE Trans. on Circuits and Systems-I and guest editor of JSSC. He has twice received Outstanding Lecturer Award from the department of EE and KAIST.

Information
Solid-state Ciruits Chair
Shahriar Mirabbasi
shahriar@ece.ubc.ca

Bio-inspired polarization Imaging – making the invisible visible

Jan Van der Spiegel,
University Pennsylvania

Distinguished Lecturer

Monday 11 May

17:30 to 18:45

Rm 2020, Kaiser Building

2332 Main Mall, UBC

The talk will discuss our recent work on CMOS vision sensors for polarization imaging. We will review briefly the concepts of polarization and how it is used by various species in nature to enhance their vision or to aid with navigation and communication. Inspired by the biology we have used polarization for a variety of applications to detect features that are hard to see or even invisible to the human eye. Motivated by the potential advantages of polarization imaging, we have developed a novel CMOS imager that combines the pixel array with micropolarizers.

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Speaker: Jan Van der Spiegel is a Professor of the Electrical and Systems Engineering Department, and the Director of the Center for Sensor Technologies at the University of Pennsylvania. He is the former chair of the Electrical Engineering and interim chair of the Electrical and Systems Engineering Departments. Dr. Van der Spiegel received his Masters degree in Electro-Mechanical Engineering and his Ph.D. degree in Electrical Engineering from the University of Leuven, Belgium, in 1974 and 1979, respectively. His primary research interests are in mixed-mode VLSI design, CMOS vision sensors for polarization imaging, biologically based image sensors and sensory information processing systems, micro-sensor technology, and analog-to-digital converters.

He is a fellow of the IEEE, received the IEEE Major Educational Innovation Award, and is the recipient of the IEEE Third Millennium Medal, the UPS Foundation Distinguished Education Chair and the Bicentennial Class of 1940 Term Chair. He received the Christian and Mary Lindback Foundation, and the S. Reid Warren Award for Distinguished Teaching, and the Presidential Young Investigator Award. He has served on several IEEE program committees (IEDM, ICCD, ISCAS and ISSCC) and was the technical program chair of the 2007 International Solid-State Circuit Conference (ISSCC 2007).

He is an associate Editor of the IEEE Tr. of Biomedical CAS, and section Editor of Electrical and Electronic Engineering of the J. of Engineering of the IET, and former Editor of Sensors and Actuators A for North and South America. He has been the chair of the IEEE SSCS Chapters committee. Under his leadership the chapters has grown from one to 88.

Information
Solid-state Ciruits Chair
Shahriar Mirabbasi
shahriar@ece.ubc.ca

Payam Heydari
U California, Irvine

Monday 11 May

19:00 to 20:15

Rm 2020, Kaiser Building

2332 Main Mall, UBC

Millimeter-wave and terahertz integrated circuits in silicon technologies: challenges and solutions

The vastly under-utilized spectrum across millimeter-wave (mm-wave) and terahertz (THz) bands has generated great deal of excitement to investigate futuristic systems for 10+ gigabit short-range wireless as well as wideband sensing/imaging applications. Simply put, the shorter wavelength associated with the mm-wave/THz band is appealing since the physical dimensions of the antenna and associated electronics are reduced in size, making it possible to design multi-antenna structures to achieve beamforming, spatial diversity and multiplexing. Owing to aggressive scaling in feature size and device fT/fmax, nanoscale (Bi)CMOS technology potentially enables integration of sophisticated systems at THz frequency range, once only be implemented in compound III-IV semiconductor technologies. This talk will give an overview of recent advances in designing silicon-based integrated circuits will be capable of operating close to the maximum operation limits of silicon-based transistors. The talk then will discuss in depth about two case studies designed in UCI's Nanoscale Communication Integrated Circuits (NCIC) Labs; namely, the world's highest fundamental frequency fully differential transceiver in CMOS at 210 GHz, and the world's highest frequency PLL-based Synthesizer in Silicon at 300GHz with a wide tuning range.

Speaker: Payam Heydari is currently a Professor of Electrical Engineering at the University of California, Irvine. His research covers the design of terahertz/millimeter-wave/RF/analog integrated circuits. He is the (co)-author of two books, one book chapter, and more than 110 journal and conference papers. He has given Keynote Speech to IEEE GlobalSIP 2013 Symposium on Millimeter Wave Imaging and Communications and served as Invited Distinguished Speaker to the 2014 IEEE Midwest Symp. on Circuits and Systems. He is the Distinguished Lecturer of IEEE Solid-State Circuits Society.

Dr. Heydari is recipient of the Distinguished Engineering Educator Award from Orange County Engineering Council. He is the recipient of the 2010 Faculty of the Year Award from UC-Irvine's Engineering Student Council (ECS), the 2009 School of Engineering Best Faculty Research Award, the 2007 IEEE Circuits and Systems Society Guillemin-Cauer Award, the 2005 IEEE Circuits and Systems Society Darlington Award, the 2005 National Science Foundation (NSF) CAREER Award, the 2005 Henry Samueli School of Engineering Teaching Excellence Award, and the Best Paper Award at the 2000 IEEE Int'l Conference on Computer Design (ICCD). The Office of Technology Alliances at UCI has named Dr. Heydari one of 10 Outstanding Innovators at the university. He is the co-recipient of the 2009 Business Plan Competition First Place Prize Award and Best Concept Paper Award both from Paul Merage School of Business at UC-Irvine. He was recognized as the 2004 Outstanding Faculty in the EECS Department of the University of California, Irvine. His research on novel low-power multi-purpose multi-antenna RF front-ends received the Low-Power Design Contest Award at the 2008 IEEE Int'l Symposium on Low-Power Electronics and Design (ISLPED).

Dr. Heydari currently serves on the Technical Program of International Solid-State Circuits Conference (ISSCC). He served as the Guest Editor of IEEE Journal of Solid-State Circuits (JSSC), and Associate Editor of IEEE Trans. on Circuits and Systems - I, and served on the Technical Program Committees of Compound Semiconductor IC Symposium (CSICS), Custom Integrated Circuits Conference (CICC). He is the director of the Nanoscale Communication IC (NCIC) Labs.

Information
Solid-state Ciruits Chair
Shahriar Mirabbasi
shahriar@ece.ubc.ca

13MAY15

IEEE Vancouver 2015 AGM
Saturday 07 March

Over 100 members, guests and friends of IEEE Vancouver gathered at the Vancouver Hilton Metrotown to receive the Section's business reports; meet with colleagues; enjoy a fine dinner; and listen to dynamic keynote speaker, Dr. George Tyc, UrtheCast deliver an interesting and informative talk on "Urthecast's Ultra HD video platform on the International Space Station". The audience appreciated the technical advances in the Urthecast HD camera, and were especially enthusiastic with the demonstration of high resolution images of Earth taken from the space station.

For the many awards, recognitions, and photos please visit
http://vancouver.ieee.ca/AGM2015

Also, attendees (and other section members) are invited to complete a survey to help us evaluate and improve the AGM in coming years. Please take the following link to complete the survey: http://goo.gl/m4klV7. Any additional feedback or suggestions regarding the AGM can be forwarded to Vice Chair Lee Vishloff (email Lee.Vishloff (at) ieee.org)

Kwantlen celebrates new IEEE Student Branch

On receiving its charter on 12 February 2015 Kwantlen Polytechnic University became the sixth IEEE Student Branch in mainland British Columbia. Its opening was celebrated 12 March with Kwantlen's Wayne Tebb, Dean, School of Business, and IEEE Vancouver chair Bob Gill offering their best wishes and support.

The branch counselor is Mandeep Pannu, (Dept of CS and IT) and Karen Domingo is its first Chair. Photos of the event are available at: http://Vancouver.ieee.ca/KPU_Student_Branch_Opening and additional information is available from Mandeep Pannu, email: Mandeep.Pannu at kpu.ca.

Mandeep Pannu,   Bob Gill,   Abhijit Sen,   Wayne Tebb,   Xing Liu