38th IEEE Sarnoff Symposium, NJIT, Newark, NJ, Sep. 18-20, 2017

SCHEDULE OF KEYNOTE AND INVITED PRESENTATIONS

MONDAY, SEPTEMBER 18, 2017

08:00-09:30 **Registration and Networking**

09:30-12:30 **Tutorial – Bitcoin and Blockchain Explained**
Melanie Swan, *MS Futures Group*

09:30-12:30 **Tutorial – Adaptive High Linearity Intensity Modulator for Advanced Microwave Photonic Links**
Dr. Benjamin Dingel [1] and Dr. N. Madamopoulos [2]
[1] *Nasfine Photonics, Inc.*
[2] *Dept. Aeronaut. Science, Hellenic Air Force Acad.*

12:30-14:00 **Lunch**

14:00-17:00 **Tutorial – 5G Communications**
Dr. Harish Viswanathan, *Nokia Bell Labs*

TUESDAY, SEPTEMBER 19, 2017

08:00-09:00 **Registration and Networking**

09:00-09:30 **Opening Remarks**

09:30-10:00 **Keynote Presentation – 5G Wireless Networks and the Future of Wireless Communications Research**
Dr. Thyagarajan Nandagopal, *Program Director, Nat'l Science Foundation*

10:00-10:20 **Taming of the Wild: IoT in Public Spaces**
Prof. Robin Hillary Kravets, *University of Illinois at Urbana-Champaign*

10:20-10:40 **Blockchain: The Revolutionary Trust Technology**
Prof. Raj Jain, *Washington University in St Louis*

10:40-11:00 **Implications of 5G, RAN, and IoT on Edge Computing**
Gnanavelkandan Kathirvel, *Director, AT&T*

11:00-11:20 **Coffee Break**

11:20-11:40 **Queries as First-Class Citizens: Big Data for Cyber Security**
Dr. Walter Willinger, *Chief Scientist, NIKSUN*

11:40-12:10 **Keynote Presentation – The Economics of Networks: The Challenges of Rural Networkification**
Prof. Henning Schulzrinne, *Columbia University*

12:10-13:30 **Lunch**

13:30-13:50 **Learned Path Planning and Vehicle Control**
Dr. Ben Firner, *NVIDIA*

13:50-14:10 **Blockchain and Its Applications in IoT**
David Snyder, *42TEK, Inc.*

14:10-14:30 **Smart Cities: Defining the Mission and Approach**
Thomas E. Motyka, *Senior Exec. Director, NJ Innovation Institute*

14.30-14:50 **Network Analytics in the Era of Virtualized Software Driven Networks**
Dr. Vikram Saksena, *CTO, NetScout Systems*

14:50-15:10 **Coffee Break**

15:10-15:30 **Optimizing and Protecting Operation of Services in Unlicensed and Shared Spectrum**
Narayan Menon, *CTO, XCellAir*

15:30-15:50 **Deep Learning Solutions at Intel Nervana**
Dr. Kyle Ambert, *Senior Deep Learning Data Scientist, Intel Nervana*

15:50-16:10 **LTE and its Applications in the Unlicensed Spectrum**
Dr. Eugene Chai, *NEC Laboratories America*

16:10-16:30 **How Safe are Wireless Devices?**
Joseph E. Jesson, *CEO, RFSigint, Inc.*

16:30-17:00 **Keynote Presentation – Towards Resilient Smart Cities**
Prof. Narayan B. Mandayam, *Rutgers University*

17:00-17:20 **Future Networks Automation with SDN and NFV**
Hans Raj Nahata, *Director, Verizon*

18:00-19:00 **Cocktail Reception and Hors d'Oeuvres**

WEDNESDAY, SEPTEMBER 20, 2017

08:00-09:30 **Registration and Networking**

09:30-09:50 **Quantum Technology for IoT**
Dr. Peter Mueller, *IBM Zurich Research Laboratory*

09:50-10:10 **For Good Measure: Programmable Measurement Using Emerging Switches**
Prof. Jennifer Rexford, *Princeton University*

10:10-10:30 **ONAP: Open Network Automation Platform**
Dr. Oliver Spatscheck, *Director and Fellow, AT&T*

10:30-10:50 **A Perspective on Infrastructure Services Outside the Networking Bubble**
Michael Langdon, *Director, Juniper Networks*

10:50-11:10 **Coffee Break**

11:10-11:30 **CBRS and Wi-Fi: Convergence or Competition?**
Mark Poletti, *Director of Wireless Technologies, CableLabs*

11:30-12:00 **Keynote Presentation – Next Generation Architectures and Services: Cable Perspective**
Dr. Robert Howald, *Vice-President, Comcast*

12:00-13:20 **Lunch**

13:20-13:40 **Ensemble Clustering for Grouping Telecom's Network Performance Data**
M. Antony Raj, *Director, Business Intel., Verizon*

13:40-14:00 **Multipath TCP Algorithms: Theory, Design and Implementation**
Dr. Anwar Walid, *Dept. Head, Nokia Bell Labs*

14:00-14:20 **5G as a Catalyst for New Services: Challenges and Promises**
Miguel A. Dajer, *Vice-President Wireless, Huawei USA*

14:20-14:40 **FPGA Acceleration for Data Center Applications**
Dr. Seong Hwan Kim, *Principal Architect, Xilinx*

14:40-15:00 **Coffee Break**

15:00-15:20 **Is Your Blockchain Really Open?**
Christopher Ferris, *IBM Distinguished Eng., CTO Open Technology*

15:20-15:40 **Communications Framework to Enable Safe Integration of UAVs into National Air Space**
Nagi Mahalingam, *Member Technical Staff, InterDigital Labs*

15:40-16:00 **Decision Tree, Weighted Gini-index and Imbalanced Classification**
Prof. MengChu, Zhou, *NJIT*

16:00-16:20 **Fast Cash? Not So Fast . . . Bluetooth Skimming at ATMs and Gas Pumps**
Scott N. Schober, *President and CEO, Berkeley Varitronics Systems, Inc.*

16:20-16:50 **Poster Session**

16:50-17:00 **Closing Remarks**