

5G Speaker Photos and Bios



Debabani Choudhury joined Intel Labs in 2006. She provides strategic research directions and leads research and development of RF/millimeter-wave technologies for next generation wireless platforms and connected vehicle integration. She has a broad range of expertise in RF, millimeter wave, and terahertz device, circuits, antennas, system, packaging, integration and technologies. She has 25+ years of research experience and holds a PhD degree in Electrical Engineering. Before joining Intel, she held senior research staff positions at HRL Labs (formerly Hughes Research Laboratories) and Millitech Corporation where she developed various millimeter-wave and terahertz technologies for imaging as well as other space and defense applications. Prior to that, she worked at NASA Jet Propulsion Laboratory (JPL) on THz/submillimeter-wave devices and components for space-based heterodyne receiver applications. Debabani has more than 35 patents/patent applications and numerous publications. She received several NASA recognition awards for her work on heterodyne receivers, devices, multipliers, and guiding structures/ modules developed for space and defense applications. Debabani is an IEEE Fellow. Debabani has been on several Technical Program Committees (TPC) for IEEE and SPIE conferences including IEEE International Microwave Symposium (IMS), IEEE Antenna and Propagation Symposium (AP-S), IEEE Radio and Wireless Symposium (RWS), Wireless Power Transfer Conference (WPTC), European Microwave Conference (EUMC). She serves as member of multiple IEEE Microwave Theory and Technique Society (MTT-S) Technical Co-Ordination Committees: Microwave and Millimeter Wave Integrated Circuits; Wireless Communications; Wireless Energy Transfer and Conversion and Wireless Enabled Automotive and Vehicular Applications. She served on many IMS and RWS conference steering committee roles. She serves as the Guest Editor for multiple journals including Proceedings of IEEE, IEEE Transactions on Microwave Theory and Techniques (T-MTT) and multiple special issues of the IEEE Microwave Magazines. She has presented numerous invited talks at various conferences, workshops, industries, and universities worldwide. She has presented and organized numerous IEEE workshops, panel sessions, and focused sessions. Currently she is serving as a member of IEEE 5G-Initiative Committee, Chair for MTT-S and ComSoc collaboration team in addition to serving as the Chair for IEEE 5G-Summit, June 2017 and June 2018. She is also serving as a TPC Co-Chair for 5G World Forum 2018.



Ashutosh Dutta is currently Senior Wireless Communication Systems Research Scientist at Johns Hopkins University Applied Physics Labs (JHU/APL). Most recently he served as Principal Member of Technical Staff at AT&T Labs in Middletown, New Jersey. His career, spanning more than 30 years, includes Director of Technology Security and Lead Member of Technical Staff at AT&T, CTO of Wireless at a Cybersecurity company NIKSUN, Inc., Senior Scientist in Telcordia Research, Director of Central Research Facility at Columbia University, adjunct faculty at NJIT, and Computer Engineer with TATA Motors. He has more than 90 conference and journal publications, three book chapters, and 30 issued patents. Ashutosh is co-author of the book, titled, "Mobility Protocols and Handover Optimization: Design, Evaluation and Application," published by IEEE and John & Wiley that has recently been translated into Chinese Language. Ashutosh served as the chair for IEEE Princeton / Central Jersey Section, Industry Relation Chair for Region 1 and MGA, Pre-University Coordinator for IEEE MGA and vice chair of Education Society Chapter of PCJS. He co-founded the IEEE STEM conference (ISEC) and helped to implement EPICS (Engineering Projects in Community Service) projects in several high schools. Ashutosh currently serves as the Director of Industry Outreach for IEEE Communications Society and is the founding co-chair for IEEE 5G initiative. He also serves as IEEE Communications Society's Distinguished Lecturer for 2017-2018. He was recipient of the prestigious 2009 IEEE MGA Leadership award and 2010 IEEE-USA professional leadership award. Ashutosh obtained his BS in Electrical Engineering from NIT Rourkela, India, MS in Computer Science from NJIT, and Ph.D. in Electrical Engineering from Columbia University under the supervision of Prof. Henning Schulzrinne. Ashutosh is a senior member of IEEE and ACM.



As the Head of the Connectivity Lab, SCT, **Jin Bains** oversees and directs key aspects of Facebook's efforts to increase access to affordable connectivity across the globe, including the use of low-altitude, high-altitude, and satellite systems. Before joining Facebook, Jin spent over ten years at National Instruments, where he served as the Vice President of R&D, RF and Wireless Products, managing a global R&D organization of engineers and driving innovation with internal experts and key outside partners. Jin began his career as an RF Engineer and R&D manager for Hewlett Packard and Agilent Technologies. Jin holds a BS and MS in Electrical Engineering from UC Davis and Stanford, respectively.



David Lu, Vice President, D2 Platform & Systems Development, is currently responsible for development and engineering of AT&T next generation ECOMP platform and Open ECOMP (ONAP) to enable the AT&T network virtualization (SDN) and target OSS/BSS transformation including API, micro-services, policy control & orchestration, hyper-automation, and advanced data analytics. He leads an organization with more than 3,000 people across the globe. David is a well-respected leader in large scale and real time software architecture and engineering, network performance and traffic management, work flow and policy controlled automation, large databases and big data implementation/mining/analytics, machine learning, artificial intelligence, software reliability and quality, and network operations process engineering. Examples of his achievements include large scale platforms he has led and engineered that process annually: 347 Trillion network performance events and 168 Billion alarms with 99.99%+ automation; 60 Million dispatches with 14.4 Billion automated manual

steps; and over 90 Billion API transactions. Since joining AT&T Bell Labs in 1987, he has served in various leadership positions at AT&T. He has led multiple extreme automation initiatives in AT&T that resulted in Multi-Billion Dollars savings in the past 15 years and won AT&T CIO 100 Awards in 2010. He holds 43 patents and has frequently appeared as a guest speaker at technical and leadership seminars and conferences throughout the world. He received numerous industry awards including the 2015 Chairman's Award from IEEE Communication Society for Network and Systems Quality and Reliability and 2017 CIE AAEOY (Asian America Engineer of Year) Award. He has also been very active in community organizations and activities including AT&T APCA, DFW-CIE, and DFW Asian American Chamber of Commerce. He was recognized by AT&T APCA with the 2015 Corporate Leadership Award. He was accepted to the world-renowned Shanghai Conservatory of Music and came to the U.S. to complete his college education. He has an undergraduate degree in music, majoring in cello performance and graduate degree in Computer Science.



Michael Marcus was overeducated in electrical engineering from MIT. Prior to working at FCC for almost 25 years, he worked at Bell Labs, served in the U.S. Air Force, and analyzed electronic warfare issues at the Institute for Defense Analyses. At FCC his work focused on proposing and developing policies for cutting edge radio technologies such as spread spectrum/CDMA and millimeter waves. Wi-Fi and Bluetooth are results of his early leadership. He is now Director of Marcus Spectrum Solutions LLC, an independent consulting firm based in the Washington DC area and focusing on wireless technology and policy. He also teaches at Virginia Tech. He was recognized as a Fellow of the IEEE and received in 2013 the IEEE ComSoc Award for Public Service in the Field of Telecommunications "For pioneering spectrum policy initiatives that created modern unlicensed spectrum bands for applications that have changed our world."



Renato Lombardi is Head of Huawei Italy Research Center, Vice President of Huawei's Microwave Product Line. In these roles, he oversees the development and research of microwave / millimeter-wave technologies for wireless communications and the implementation of innovative mobile broadband backhauling solutions all over the world. Renato Lombardi joined Huawei in 2008, founding the Huawei Research Center in Milan, Italy. In 2011, he was awarded the title of "Fellow of Huawei". Renato has more than 25 years of experience in the microwave industry. He previously led the Siemens Microwave Business and Product Management and then appointed Head of Research and Development. He was member of the integration team of for the Siemens and Nokia joint venture in 2006, and later became the Head of Product Management of the Microwave Business Line. In 2015 Renato Lombardi has been elected Chairman of the ETSI Industry Study Group mWT (millimeter-Wave Transmission). Renato Lombardi graduated from the Politecnico of Milano, the largest technical university in Italy with a Master's Degree in Electronic Engineering.



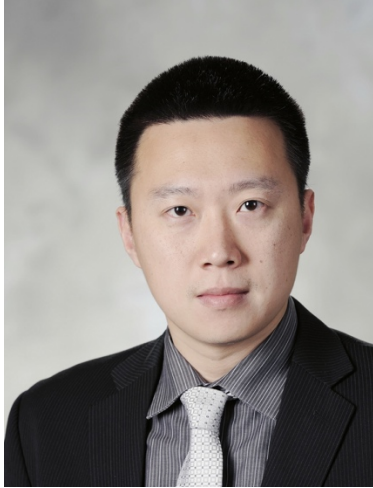
Tim Talty is a General Motors Technical Fellow and Thrust Area Lead in the Electrical and Controls Systems Research Lab. Tim provides technical leadership of the development of advanced technologies for autonomous vehicles use cases with a research focus in areas of wireless communications and sensors. Tim is also an Adjunct Professor at the University of Michigan-Dearborn, Department of Electrical and Computer Engineering. Prior positions included Manager HMI & Infotainment at GM, Supervisor Radios and Antennas at Ford Motor Company, Chair of the Electrical Engineering Department at Fairfield University and Associate Professor at The United States Military Academy, West Point.



Mr. Timothy Boles joined MACOM in 1991 and is one of eight current Technology Fellows at MACOM Technology Solutions. He also serves as the Chairman of the Technology Fellows Committee. Mr. Boles holds a BA degree in physics from St. Mary's University and a MA degree in physics from Washington University. He is the holder of 17 US patents and has authored/co-authored over 130 publications. His current assignment is as individual contributor in Technology Development. In this role he has continued to work in the field of high frequency devices/structures to investigate the integration of new and emerging technologies to advance the overall power, frequency, and performance capabilities of microwave and mmW transistor and diode based devices and integrated circuits.



Shankaran Janardhanam, GF's Director of Product Line Management for RF, has made many contributions to the technical development and business success of RF products over his entire career. In his current role he has global product responsibility for GLOBALFOUNDRIES' industry-leading portfolio of RF solutions and Go-To market responsibility. He was previously GF's manager of RF business development and field applications. Before that he was at TowerJazz, where he had various roles in design engineering, technology and product management for RF and MEMS products, and where he managed the design support function. He has an M.B.A. from University of California–Berkeley and an M.S. in electrical engineering from Temple University.



Hua Wang received his M.S. and Ph.D. degrees in electrical engineering from the California Institute of Technology, Pasadena, in 2007 and 2009, respectively. He worked at Intel Corporation and Skyworks Solutions. He is currently an associate professor with tenure at the School of Electrical and Computer Engineering (ECE) at Georgia Institute of Technology. Dr. Wang is interested in innovating mixed-signal, RF, and mm-Wave integrated circuits and hybrid systems for wireless communication, radar, imaging, and bioelectronics applications. Dr. Wang received the DARPA Young Faculty Award (YFA) in 2018, the National Science Foundation CAREER Award in 2015, the IEEE MTT-S Outstanding Young Engineer Award in 2017, the Georgia Tech Sigma Xi Young Faculty Award in 2016, the Georgia Tech ECE Outstanding Junior Faculty Member Award in 2015, and the Lockheed Dean's Excellence in Teaching Award in 2015. He holds the Demetrius T. Paris Professorship of the School of ECE at Georgia Tech. His research group Georgia Tech Electronics and Micro-System (GEMS) lab has won multiple best paper awards, including the IEEE RFIC Best Student Paper Awards (1st Place in 2014 and 2nd Place in 2016), the IEEE CICC Outstanding Student Paper Awards (2nd Place in 2015 and 2nd Place in 2018), the IEEE CICC Best Conference Paper Award (2017), the 2016 IEEE Microwave Magazine Best Paper Award, the IEEE SENSORS Best Live Demo Award (2nd Place in 2016), as well as multiple best paper award finalists at IEEE conferences. Dr. Wang is an Associate Editor of the IEEE Microwave and Wireless Components Letters (MWCL) and a guest Editor of the IEEE Journal of Solid-State Circuits (JSSC). He is an IEEE SSCS Distinguished Lecturer for 2018/2019. He is a Technical Program Committee (TPC) Member for IEEE ISSCC, RFIC, CICC, and BCTM conferences. He is a Steering Committee Member for IEEE RFIC and CICC. He serves as the Chair of the Atlanta's IEEE CAS/SSCS joint chapter, which won the IEEE SSCS Outstanding Chapter Award in 2014.



Charles Schroeder, Business and Technology Fellow, is prototyping and nurturing disruptive innovations in technologies and business models critical to NI's customer's long-term needs in Automated Test, including the new set of test challenges introduced by the adoption of 5G cellular technologies. Since joining NI in 1995, Schroeder has held various positions, including the Vice President of Product Marketing for RF and wireless communications and leadership roles across the RF, modular instruments, DAQ, and IMAQ product lines. Charles is recognized for his excellent communication and presentation skills as demonstrated by his regular appearances on the NIWeek stage. Schroeder holds bachelor's and master's degrees in electrical engineering from Texas A&M University.



Roger Nichols has been directing Keysight's 5G Programs for four years. His 33 years of engineering and management experience in wireless test and measurement at Hewlett-Packard, Agilent Technologies, and Keysight spans roles in manufacturing, R&D, and marketing. He has worked in programs starting with analog cellular radio evolving to 5G and every standard in between. He spent seven years as the Senior Marketing Director for Keysight's (Agilent's) Mobile Broadband Division responsible for the wireless test-sets and systems used in all major design and certification labs as well as manufacturing facilities worldwide. Rogers holds a BSEE from the University of Colorado, Boulder.



Ivan Seskar is an Associate Director at WINLAB, Rutgers University responsible for experimental systems and prototyping projects. He is currently the program director for the COSMOS project responsible for the New York City NSF PAWR deployment, the PI for the NSF GENI Wireless project, which resulted in campus deployments of LTE/WiMAX base stations at several US universities, and the PI for the NSF CloudLab deployment at Rutgers. He has also been the co-PI and project manager for all three phases of the NSF-supported ORBIT mid-scale testbed project at WINLAB, successfully leading technology development and operations since the testbed was released as a community resource in 2005 and for which the team received the 2008 NSF Alexander Schwarzkopf Prize for Technological Innovation. Ivan is a co-chair of the IEEE 5G Testbed Working Group, a Senior Member of the IEEE, a member of ACM and the co- founder and CTO of Upside Wireless Inc.