

5G Technology Workshop Speaker Profile

Prof. K V S Hari – Indian Institute of Science (IISc) Bangalore

K. V. S. Hari received his Ph.D. degree from the University of California at San Diego, La Jolla, CA, USA, in 1990. Since 1992, he has been with the Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, India, where he is currently a Professor and coordinates the activities of the Statistical Signal Processing Laboratory. He was an Affiliated Professor (2010-16) with the Department of Signal Processing, KTH Royal Institute of Technology, Stockholm, Sweden. He has been a Visiting Faculty Member with Stanford University, Stanford, CA, USA; KTH Royal Institute of Technology, Stockholm, Sweden; and Aalto University, Espoo, Finland (formerly Helsinki University of Technology). While at Stanford University, he worked on multiple-input multiple-output (MIMO) wireless channel modelling and co-authored the Worldwide Interoperability for Microwave Access standard on wireless channel models for fixed-broadband wireless communication systems, which proposed the Stanford University Interim channel models. He was also with the Defence Electronics Research Laboratory, Hyderabad, and the Research and Training Unit for Navigational Electronics, Osmania University. His research interests include the development of signal processing algorithms for MIMO wireless communication systems, sparse signal recovery problems, indoor positioning, assistive technologies for the elderly, and neuroscience. Dr. Hari was an Editor of Elsevier's EURASIP journal Signal Processing (2006-16) and is currently the Senior Associate Editor of Springer's Indian Academy of Sciences journal, SADHANA. He is an Academic Entrepreneur and a Co-founder of the company ESQUBE Communication Solutions, Bangalore. He received the Institution of Electronics and Telecommunication Engineers S. V. C. Aiya Award for Excellence in Telecom Education and the Distinguished Alumnus Award from the Osmania University College of Engineering, Hyderabad. He is a Fellow of the Indian NAE and a Fellow of IEEE.



Dr. Ashutosh Dutta, Research Scientist, Johns Hopkins University

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. Ashutosh serves as the general co-chair for the premier IEEE 5G World Forum. 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.

Dr Aloknath De – Corporate VP and CTO, Samsung Electronics

Dr Aloknath De is an accomplished individual with over 20 years of experience in Research & Development and at senior position. He has worked at senior position in ST-Ericsson, ST Microelectronics, Hughes Software Systems, Netel Networks in the past. He is currently the Corporate Vice President and CTO Samsung Electronics India. He has over 20 patents, many product developed and over 60 peer review journals and conference proceedings to his credit. He has many recognition and awards, both national and international. Dr Aloknath is often available for talk (subject to time availability) and love to interact with faculty and students. He is senior member IEEE and fellow of IETE. His research area is IoT and Cognitive IoT apart from 5G and NB-IoT.



Subhas Mondal, Chief Architect – M&T SBU, Wipro Ltd

Subhas has over 25 years of Engineering experience primarily in Telecom R&D. He is driving adoption of new technologies in transforming Telecom Networks that include SDN/NFV, 5G, LiFi, Security and AI based network automation solutions as part of Technology BU (Business Unit) CTO function. He is a distinguished member of technical staff in Wipro DMTS community. Subhas is an engineering Graduate from IIT Kharagpur in Electronics and Electrical communications engineering. Prior to joining Wipro, he worked for CDOT as a research Engineer and developed a product from scratch for remote switching need.



Dr Debabrata Das – Professor and Hewlett Packard Chair, IIITB

Dr. Debabrata Das is serving as Professor and Hewlett Packard Chair at IIIT-Bangalore (IIITB). Before joining IIIT-B, he had served at G S Sanyal School of Telecommunication at IIT Kharagpur and later at Kirana Networks in New Jersey, USA. His main areas of research interest are IoT and Wireless Access Network's MAC, QoS, Power saving. He has more than 110 peer reviewed papers in different Transaction/Journals and International Conferences. His 7 patents are under review. He and his wireless network team had contributed three ideas to IEEE 802.16m Broadband Wireless Standard. Dr Das has received Prof. K. Sreenivasan Memorial Award 2017 for excellent teaching in the areas of Telecommunication from IETE. Dr. Das has received Global IEEE MGA Achievement Award 2012 and Outstanding Volunteer Award-2008 IEEE Bangalore Section. He is Fellow-IETE, Fellow-IE and SM-IEEE. He is Chairman of IEEE



Bangalore Section and IT-Service Management Forum India (itSMF); Board Member of IIIT-Bhubaneswar; Technical and Empower Committee member of e-Governance for Govt. of Karnataka. Dr. Das was the first Dean-Academic and R&D of IIIT-Bangalore.

Niraj Nanavaty, Radio Product Manager, Nokia

Niraj works in Nokia as Radio Product Manager for India & MEA markets. He has extensive experience in 2G, 3G, 4G and 5G wireless communication systems. He has three patents under filing. He has written multiple papers of which two were published in reputed IEEE conferences. He was part of Nokia pair that won Unicom 2015 Ethical Hacking contest. He represented Nokia in 2015 Security Best Practice Meet conducted by DSCI, NASSCOM. Niraj holds an M.Tech degree from IIT, Kanpur and an MBA degree from IIM, Bangalore. Niraj's interests include 5G topics like 5G NR (New Radio), RRM, Massive MIMO and Beamforming.



Prof Chandra Murthy, IISc Bangalore

Chandra R. Murthy is an associate professor in the ECE department at IISc. His research interests are in the areas of physical and MAC layer aspects of next generation wireless communications, sparse signal recovery, energy harvesting communications and performance optimization.



Dr Dilip Krishnaswamy – Vice President, Future Tech, Reliance

Dr Dilip has over 20 years of working experience at senior level at INTEL, QUALCOMM and IBM. He has over 60 US patent granted and close to 80 Peer Review journal and conference proceedings. He is an accomplished Researcher & Technical Leader. He has been awarded 3 best papers in Machine Learning, Mobile/Wireless Systems, Networking, Data Centers, Distributed Clouds, Edge Services, Cognitive Systems, IoT, M2M, Hierarchical Distributed Analytics, Video Processing. Recent technical / mgmt. expertise in projects related to distributed information processing / machine learning / analytics / content delivery, blockchain technology applied to banking/finance/supply-chain/telecom domains, distributed function virtualization across distributed data centers, cognitive systems, distributed resources/energy management, distributed IoT / 5G systems.



Subodh Gajare, Senior Architect, CISCO R&D Centre

Subodh has over 25 years experience in IT industry. Core activities involve: Platform Development, testing, validation, designing, operations and developing solutions across technologies. Currently he is a Solution Architect for Cisco – Design and implement solutions for Service provider and Enterprise customers – based on SDN/NFV, IoT, Mobility (3G to 5G transformation), Security, Virtualization, Cloud, designing s/w Orchestration platforms for end-2-end management of networks. Subodh is a Technical Leader for incubating IoT industry solutions – in Digital Manufacturing, Smart Cities, Health care, Education, Energy and Transportation. He works as advisor for grooming future Technical leaders/Architects in Cisco. He represents Cisco Networkers (now called Cisco Live) in Asia and US for past 14 years. Cisco Live is an industry event showcasing Cisco Innovative Solutions and architectures in an immersive learning model. He speaks at Cisco Technical leadership Forum globally – in Americas, Europe & Asia Pacific, Panel speaker for Digitization and IoT summits – India and US. Subodh is highly engaged with academia worldwide.



Dr. Navin Kumar – Assoc. Prof. Amrita Vishwa Vidyapeetham (University), Bangalore

Dr Navin has over 20 years of industry and teaching experience which includes around 10 years of overseas experience in teaching and research and development. He has over 50 peer review journals and conference proceedings along with a book and book chapter. He has worked on many international EU projects. Currently he is an Associate Professor in ECE Dept. of Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Bangalore Campus. He often delivers tutorial and talk at major events including flagship conference IEEE ICC, WCNC. His research areas are 5G Wireless Technology, mmWave Technology, Visible Light Communications, Intelligent Transportation Systems and Smart City.



Dr. Vinosh James- System Engineer, Qualcomm

Dr. Vinosh James leads the technology standards effort for Qualcomm in India. He has over 15 years of standardization and systems engineering experience. He specializes on aspects of cellular connectivity, both on licensed and unlicensed technologies. He was chairman of the 5G work group in TSDSI, and is currently involved in making 5G a reality in India, especially on the vertical and adjacent market segments.



Dr Y V S Lakshmi, CDoT, Bangalore

Dr Lakshmi received her PhD from IISc Bangalore in 1993 in Electronics and Communication Engg. She has over 25 years of working experience in Industry. Dr Lakshmi is currently working as Group Leader, Intellectual Property Rights, Marketing & KMG (Bangalore) with Centre for Development of Telematics, (C-DOT). She has many achievements and awards to her credit, few of them are: Awarded the prestigious Sir M Visweswariah Award on his 151st birthday for outstanding contributions in engineering field in Karnataka on 15th September 2011; • Represented in IEEE Student/GOLD/WIE Congress, 2011; Emerging technologies realizing innovative ideas that will



define a better tomorrow for humanity”, Auckland, New Zealand from July 7-10, 2013 • Represented IEEE WIE Bangalore Section at IEEE Section Congress 2014 on ‘Inspiring our Leaders of tomorrow’, Amsterdam, from Aug 22 -24 , 2014. She is IEEE Senior Member, IEEE Bangalore section, and IEEE-WIE Chairperson 2010 and 2015. Her research interests are in 5G, 5G standards, 5G essential patents IP landscape, IPR, patenting, Etc. Received the prestigious IPR Award for C-DOT in the category of R&D by Govt. of India. Working group member for IPR policy of TSDSI. IPR Handbook for cdot made. Contributed to preparation of Report on “Telecom sector roadmap for innovation 2010-2020”. Several Invited lectures on IPR Law, IPR (in Hindi), Essential patents etc. Chaired a number of technical sessions at various national and International conferences.

Prof. K J Vinoy, IISc, Bangalore

Dr. K.J. Vinoy, is currently a Professor with ECE Department, Indian Institute of Science (IISc), Bangalore and Chairperson, Centre for Scientific and Industrial Consultancy, IISc, Bangalore. He obtained PhD from Pennsylvania State University in 2002 where he was a Post Doctoral Researcher during Sep 2002 - Aug 2003. Earlier, he obtained MTech (Electronics) from Cochin University of Science and Technology, Kochi, and BTech (Applied Electronics & Instrumentation) from College of Engineering Trivandrum. He worked at the National Aerospace Laboratories, Bangalore from 1994 to 1998. His research interests span different areas of microwave engineering including Antennas, RF & Microwave circuits and systems, Computational Electromagnetics and Microwave Materials. He was awarded IEEE Ulrich L. Rohde Innovative conference Paper Award on Computational Electromagnetics and was selected for the IEEE APS R-10 Distinguished Speaker Program in 2015. He is elected as a fellow of the Indian National Academy of Engineering. He is an Editorial Board member of several journals including International Journal of RF and Microwave Computer Aided Engineering (John Wiley) since 2010; Int. Journal of Electronics & Communications (Elsevier, 2010-2016) etc . He has authored four text books, three of which are used as text books in many international universities.



Ravikanth Pasumarthy, AVP, ARICENT

RaviKanth has around 22 years of experience in wireless and satellite based systems and is working as Assistant Vice President at Aricent. He is the System architect in 4G and 5G areas for both customer and inhouse programs. Ravi has experience in successful conceptualization, architecture, design to delivery of wireless base-stations of various form-factors (macro to small-cell) across GSM/EDGE, 3G and LTE areas for multiple customers. His area of expertise involves Solution engineering, System architecture of complete wireless systems, expertise in PHY and L2/L3 realization. Currently his focus is on soft-PHY design, C/U/M-plane architectures, virtualization, cloud-RAN design for 4G/5G areas.



Vinesh Varghese, Director Technology, Aricent

As Director, Technology at Aricent Vinesh Varghese is charged with helping define future technology strategy for the Systems & Silicon Design Practice. Activities which include identifying and tracking key technical trends, performing technical due diligence, and supporting advanced technology adoption for the various ongoing Engineering programs. Additional responsibility includes in architecting system and helping chart, end use cases to the next generation communication platforms. Prior to Aricent, Vinesh spent close to 13 years at Wipro Technologies, as an Engineering



Manager, overlooking end-to-end product developmental activities from initial conceptual designs till volume ramp up for enterprise Wireless/Wireline Communication platforms. He holds a bachelor's degree in electronics engineering from Cochin University and currently pursuing a master's degree in business administration. He is a member of several IEEE societies and an ACM member. He likes playing with new software, hardware gadgets and enjoys experimenting with new types of food&cooking.