



Distinguished Lecture Series – September 13, 201

Dr. Sudhir Dixit

Fellow and Evangelist at Basic Internet Foundation

Talk 1: New Directions in Technology Innovations for 5G and Beyond

11h00-1h00, University of Rwanda, CST, ICTP seminar hall Eistein building (former KIST-2)

Host: Prof. Nelson Ijumba and Dr. Gaurav BAJPAI.

Abstract: This talk highlights the major advances that will enable 5G to meet its objectives including MIMO, and mmWave as well as massively parallel access for IoT applications. Networking solutions based on intra and inter technology Heterogeneous Networks and Cloud radio access architectures will also be presented. We concluded with a brief description of open research and technology challenges for implementation of future networks.

Talk 2: Software Defined Networking (SDN), Network Function Virtualisation (NFV) and Cloud Computing for 5G and Beyond Systems

16h00 – 17h00, CMU-Africa, Auditorium A203

Host: Prof. Vijayakumar Bhagavatula, CMU-Africa Director

Abstract: Starting with an overview of 5G radio access technologies we then describe how licensed and unlicensed band will jointly deliver the expected performance. We turn to the future core network technologies and the resulting flexible network architecture solutions that leverage the confluence of IT and telecommunications via SDN and NFV. Describing their role and benefits for 5G, we conclude with open research and technology challenges for implementation of future generation networks.

Bio

Sudhir Dixit is a Senior Fellow and Evangelist at the Basic Internet Foundation in Oslo, Norway. As a Docent at the University of Oulu, Finland, he also works on the Academy of Finland 6G Flagship Project. From 2015 to 2017 he was the CEO and Co-Founder of a start-up, Skydoot, Inc. From 2013 to 2015, he was a Distinguished Chief Technologist and CTO of the Communications and Media Services Business Unit for the Americas Region of Hewlett-Packard Enterprise Services in Palo Alto, CA, and from 2009 to 2013, he was the Director of Hewlett-Packard Labs India in Palo Alto and Bangalore. Before joining HP, he was a Senior Director at BlackBerry; Head of Network Technology USA at Nokia Siemens Networks; Head of Nokia Research Center at Boston; Principal Scientist and MTS at GTE and NYNEX Science & Technology (now Verizon Communications); Principal Engineer at Codex Motorola, Wang Laboratories and Harris Corporation. Prior to that, he was a Research Engineer at Standard Telecom Laboratories in Harlow, Essex in the United Kingdom.

Dixit has 21 patents and eight books. In 2018, he was appointed a Distinguished Lecturer by the IEEE Communications Society for a two-year term. He is presently a Board Member & Working Group Chair at the Wireless World Research Forum (WWRF). He is also on the editorial board of the Wireless Personal Communications Journal. From 2010 to 2012, he was an Adjunct Professor of Computer Science at the University of California, Davis. A Life Fellow of the IEEE, Fellow of IET and IETE, Dixit received his B.E. from MANIT, Bhopal, M.E. from BITS, Pilani, Ph.D. from the University of Strathclyde, Glasgow, and M.B.A. from the Florida Institute of Technology, Melbourne.