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IEEE LANMAN 2020

The 26th IEEE International Symposium on Local and Metropolitan Area Networks

13-15 July 2020 – Virtual Conference

Day 1 – Monday July 13, 2020	
Time	Event
09:30 - 10:00	Opening and Welcome
10:00 – 11:00	Keynote #1: 6G – A True Step Beyond 5G – Gerhard P. Fettweis (TU Dresden)
11:10 – 11:45	Invited Talk #1: Conquering the Terahertz Band - Josep M. Jornet (Northeastern University)
11:45 – 12:35	<p style="text-align: center;">Session 1: Information-Centric Networking</p> <p>1. On the Scalability of WebRTC with Information-Centric Networking Michele Papalini, Giovanna Carofiglio and Alberto Compagno (Cisco Systems, France); Angelo Mantellini (Cisco Systems, Switzerland); Luca Muscariello (Cisco Systems, France); Jacques Samain (Cisco, France); Mauro Sardara (Cisco Systems, France).....1</p> <p>2. Eco-friendly Caching and Forwarding in Named Data Networking Seng-Kyoun Jo (Technische Universität Darmstadt, Germany); Lin Wang (VU Amsterdam & TU Darmstadt, The Netherlands); Jussi Kangasharju (University of Helsinki, Finland); Max Muehlhaeuser (Technical University Darmstadt, Germany).....7</p>
13:30 – 14:05	Invited Talk #2: Convergence, cross-disciplinary research and wireless networking - Thyagarajan Nandagopal (NSF)
14:05 – 14:55	<p style="text-align: center;">Session 2: 5G and mmWave</p> <p>1. On the Potential Benefits of Mobile Access Points in mmWave Wireless LANs Yuchen Liu, Yubing Jian, Raghupathy Sivakumar and Douglas Blough (Georgia Institute of Technology, USA).....13</p>

	<p>2. A Study of Network-Side 5G User Localization Using Angle-Based Fingerprints Abhigyan Sharma (AT&T Labs Research, USA); Jiayi Meng (Purdue University, USA); Bharath Balasubramanian (AT&T Labs – Research, USA); Gueyoung Jung (AT&T Labs-Research, USA); Matti Hiltunen (AT&T Labs – Research, USA); Y. Charlie Hu (Purdue University, USA); Tuyen X Tran (AT&T Labs Research, USA).....19</p>
<p>15:05 – 16:20</p>	<p style="text-align: center;">Session 3: Containers and Network Interfaces</p> <p>1. A SmartNIC-Accelerated Monitoring Platform for In-band Network Telemetry Yixiao Feng (Texas A&M University, USA); Sourav Panda (University of California, Riverside, USA); Sameer G Kulkarni (Indian Institute of Technology, Gandhinagar, India); K. K. Ramakrishnan (University of California, Riverside, USA); Nick Duffield (Texas A&M University, USA)25</p> <p>2. Hardware Accelerations for Container Engine to Assist Container Migration on Client Devices Shreyansh Chhajer (University of California, Santa Barbara, USA); Akhilesh S. Thyagaturu (Intel Corporation & Arizona State University, USA); Anil Yatavelli and Poornima Lalwaney (Intel Corp., USA); Martin Reisslein (Arizona State University, USA); Kannan Raja (Intel Corp., USA).....31</p> <p>3. Understanding Container Network Interface Plugins: Design Considerations and Performance Shixiong Qi (University of California, Riverside, USA); Sameer G Kulkarni (Indian Institute of Technology, Gandhinagar, India); K. K. Ramakrishnan (University of California, Riverside, USA).....37</p>

<h2 style="margin: 0;">Day 2 – Tuesday, July 14, 2019</h2>	
<p>Time</p>	<p>Event</p>
<p>09:30 – 09:55</p>	<p style="text-align: center;">Session 4: Internet of Things</p> <p>1. Generating IoT traffic: A Case Study on Anomaly Detection</p>

	Hung Nguyen-An (Shibaura Institute of Technology, Japan & Hanoi University of Science and Technology, Vietnam); Thomas Silverston, Taku Yamazaki and Takumi Miyoshi (Shibaura Institute of Technology, Japan).....43
10:00 – 11:00	Keynote #2: Achieving Low Latency Mobile Edge Cloud Services in Next-Generation Wireless Networks - Dipankar Raychaudhuri (Rutgers University)
11:10 – 12:25	<p style="text-align: center;">Session 5: Routing and Congestion Control</p> <p>1. BBRv1 vs BBRv2: Examining Performance Differences through Experimental Evaluation Aarti Nandagiri (National Institute of Technology Karnataka, India); Mohit P. Tahiliani (National Institute of Technology Karnataka, Surathkal, India); Vishal Misra (Columbia University, USA); K. K. Ramakrishnan (University of California, Riverside, USA).....49</p> <p>2. Managing State for Failure Resiliency in Network Function Virtualization Sameer G Kulkarni (Indian Institute of Technology, Gandhinagar, India); K. K. Ramakrishnan (University of California, Riverside, USA); Timothy Wood (The George Washington University, USA).....55</p> <p>3. Enabling Fast Failure Recovery in OpenFlow networks using RouteFlow Sachin Sharma (National College of Ireland, Ireland); Didier Colle (IMEC – Ghent University, Belgium); Mario Pickavet (IMEC - Ghent University, Belgium).....61</p>
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15:45 – 16:15	Closing Session