

PROGRAM AT A GLANCE

WOCC, Friday, May 8, 2026		
09:00–15:30	Registration	
10:30–10:35	Opening Remarks	
10:35–11:35	K1 Keynote Session <i>(Chair: Zhanyang Zhang)</i>	Prof. Vincent Poor – Princeton University <i>“Resource Constrained Learning over Wireless Networks”</i>
11:35–12:35	K2 Keynote Session <i>(Chair: Zhanyang Zhang)</i>	Prof. Stephen F. Smith – Carnegie Mellon University <i>“Smart Infrastructure for Future Urban Mobility”</i>
12:35–13:30	Lunch	
13:30–15:10	W1 AI/ML for Wireless & Channel Estimation <i>Chair: Vinay A. Vaishampayan</i> <i>City University of New York, USA</i>	O1 Advanced Photonics and Modulation <i>Chair: Li Ge</i> <i>City University of New York</i>
		A1 Edge AI and Systems <i>Chair: Cong Qi</i> <i>New Jersey Institute of Technology, USA</i>
15:10–15:30	Break	
15:30–17:30	W2 Wireless Edge Network <i>Chair: Tao Han</i> <i>New Jersey Institute of Technology</i>	O2 Photonic Devices and VLC <i>Chair: Liang Zhang</i> <i>University of Maryland Eastern Shore, USA</i>
		A2 Core AI/ML Methods <i>Chair: Huaxia Wang</i> <i>Rowan University, USA</i>
WOCC, Saturday, May 9, 2026		
09:00–10:20	W3 Remote Session <i>Chair: Meilong Jiang</i> <i>Qualcomm, USA</i>	O3 Remote Session <i>Chair: Liang Zhang</i> <i>University of Maryland Eastern Shore, USA</i>
		A3 Remote Session <i>Chair: Yuanjie Zou</i> <i>New Jersey Institute of Technology</i>
10:00–13:30	Poster Session Presentations	
10:30–11:30	K3 Keynote Session <i>(Chair: Tao Han)</i>	Dr. Junyi Li – Qualcomm <i>“6G Enabling Scalable Mobile Connectivity for AI-Driven Digital Society.”</i>
11:30–12:30	K4 Keynote Session <i>(Chair: Tao Han)</i>	Prof. Jian Song – Tsinghua University <i>“Research on Heterogeneous VLC-RF Communications for Internet of Vehicles.”</i>
12:30–12:40	Best Paper & Poster Category Award Ceremony	
12:40–13:30	Lunch	
13:30–15:10	W4 RIS, UAV & Next-Gen Network Infrastructure <i>Chair: Zhengxiang Ma</i> <i>Futurewei Technologies, USA</i>	O4 Fiber System and Network <i>Chair: Xin Jiang</i> <i>City University of New York, USA</i>
		A4 AI Applications and Data-Driven Intelligence <i>Chair: Zhanyang Zhang</i> <i>City University of New York, USA</i>

K – Keynote (Room 240)

W – Wireless (Room 230)

O – Optical (Room 235)

A – AI (Room 240)

WOCC Technical Sessions – Friday, May 8th, 2026, 13:30 – 15:10

<p>W1 AI/ML for Wireless & Channel Estimation <i>Chair: Vinay A Vaishampayan</i> <i>City University of New York, USA</i></p>	<p>O1 Advanced Photonics and Modulation <i>Chair: Li Ge</i> <i>City University of New York, USA</i></p>	<p>A1 Edge AI and Systems <i>Chair: Cong Qi</i> <i>New Jersey Institute of Technology, USA</i></p>
<p><i>Communication Cost of a Class of Decentralized Linear Solvers</i> <i>(Invited Paper)</i> <u>Nelson G. Brasil Jr; Vinay A Vaishampayan</u> Univ. of Campinas and City University of New York</p> <p><i>Characterizing Failures of Deep-Learning Models Under Data Paucity for Wireless Time-Varying Channel Estimation</i> <u>Reihaneh Gh. Roshan; Mohammad Rostami; Atik Faysal; Huaxia Wang; Nikhil Muralidhar</u> Stevens Institute of Technology, USA</p> <p><i>Trustworthy Autonomous RAN Orchestration: An Architectural Framework for Zero-Trust Intent-Based Control with Explainable AI</i> <u>Mukesh Dua; Tarun Kundu; Ankush Gupta</u> Independent Researcher, Seattle, USA</p> <p><i>From Theory to Field: Demonstrating Real-Time AI-powered PUSCH Channel Estimation</i> <i>(Invited Paper)</i> <u>Yeqing Hu; Panagiotis Skrimponis; Xiaochuan Ma; Chance Tarver; Kyeong Jin Kim; Mandar N Kulkarni; Yang Li; Yan Xin; Gary Xu; Jianzhong Zhang</u> Samsung Research America, USA</p>	<p><i>Potential applications of non-Hermitian photonics in optical switching and quantum communication</i> <i>(Invited Talk)</i> <u>Li Ge</u> City University of New York, USA</p> <p><i>Programmable Photonic Front-Ends for Mode Vector Direct-Detection Receivers</i> <i>(Invited Paper)</i> <u>Aishik Biswas; Md. Atiqur Rahman; Ioannis Roudas</u> Montana State University, USA</p> <p><i>Experimental study of the crosstalk impact on Stokes vector modulated (SVM) signals</i> <u>Guohong Zhao; Mark Feuer; Dwight Richards; Nicholas Madamopoulos; Xin Jiang</u> City University of New York, USA</p>	<p><i>XR-GPT: Edge-Deployed Vision-Language Model Powered Extended Reality Conversational Assistant</i> <u>Mingrui Yin; Jingwen Cui; Wantong Lyu; Tao Han</u> New Jersey Institute of Technology, NJ, USA</p> <p><i>AI-Enabled Cloud-Edge-IoT Continuum for Hyper-Distributed and Trustworthy Applications</i> <u>Abdullah Aydeger; Engin Zeydan; Ahmet Kurt</u> Florida Institute of Technology, USA</p> <p><i>Drone Recognition Using Deep Learning Methods</i> <u>Zehua Tang; Hong Man; Victor Lawrence; Yu-Dong Yao</u> Stevens Institute of Technology, USA</p>

WOCC Technical Sessions – Friday, May 8th, 2026, 15:30 – 17:30

<p>W2 Wireless Edge Network Chair: <i>Tao Han</i> New Jersey Institute of Technology</p>	<p>O2 Photonic Devices and VLC Chair: <i>Liang Zhang</i> University of Maryland Eastern Shore, USA</p>	<p>A2 Core AI/ML Methods Chair: <i>Huaxia Wang</i> Rowan University, USA</p>
<p><i>Interactive LLMs Beyond the Cloud: Toward Scalable and Embodied AI Systems</i> (Invited Paper) <u>Xueyu Hou</u> Department of Electrical and Computer Engineering, University of Maine, Orono, ME, USA</p> <p><i>Human-Centered AR: Building Scalable Systems for Shared Experiences</i> (Invited Paper) <u>Yongjie Guan</u> Department of Electrical and Computer Engineering, University of Maine, Orono, ME, USA</p> <p><i>ASIoU: A Domain-Informed Frequency-Weighted IoU Loss for RF Spectrogram Drone Detection</i> <u>Akshat Sharan; Mohammad Rostami; Atik Faysal; Hongtao Xia; Hadi Kasasbeh; Ziang Gao; Huaxia Wang</u> Rowan University, USA</p> <p><i>A Unified Robust Low-Rank Framework for Time Synchronization in Multi-Drone Networks</i> <u>Farhan Ali; Rui Zhang; Liyue Xiao; Zhi Quan</u> Shenzhen University, China</p>	<p><i>Inverse design photonic couplers with machine learning tools</i> (Invited Paper) <u>Shuwei Guo; Pingfan Wu</u> Futurewei Technology, USA</p> <p><i>3D Trajectory Optimization for UAV-assisted Covert Visible Light Communication</i> <u>Tamunoene E Bamson; Liang Zhang</u> University of Maryland Eastern Shore, USA</p> <p><i>Max-Min Fairness Precoder for Rate-Splitting Multiple Access-based VLC System</i> <u>Xiaodong Liu; Qian Wang; Liwei Tang; Baolin Lai; Yuhao Wang; Xun Zhang</u> Nanchang University, China</p>	<p><i>Semi-Supervised Masked Autoencoders: Unlocking Vision Transformer Potential With Limited Data</i> <u>Atik Faysal; Mohammad Rostami; Reihaneh Gh. Roshan; Nikhil Muralidhar; Huaxia Wang</u> Rowan University, USA</p> <p><i>Time-Series Classification Using AI Models for Digital Twin Applications</i> <u>Afshin Eisazadeh Kharabeh; Victor Lawrence; Yu-Dong Yao</u> Stevens Institute of Technology, USA</p> <p><i>An Empirical Study of Version-Control and Validation Workflows for Enterprise AI Systems</i> <u>Abhijit Choudhary; Avimanyou K Vatsa; Rohan Puppala; Aarav Rao</u> Fairleigh Dickinson University, Teaneck, USA</p>

WOCC Technical Sessions – Saturday, May 9th, 2026, 9:00 – 10:20

<p>W3 Remote Session Chair: Meilong Jiang Qualcomm, USA</p>	<p>O3 Remote Session Chair: Liang Zhang University of Maryland Eastern Shore, USA</p>	<p>A3 Remote Session Chair: Yuanjie Zou New Jersey Institute of Technology, USA</p>
<p><i>An Improved Expectation Propagation Algorithm for Massive MIMO Signal Detection (Invited Paper)</i> <u>Yong Lei, Congcong Li, Guang Chen, Huan Liu, Xing Huang, and Yueyun Chen</u> University of Science & Technology Beijing, China</p> <p><i>Software-Defined Networking-Based Topology Management for V2I Collaboration Networks</i> <u>Lu Yang; JiuJun Cheng; Mengchu Zhou</u> Tongji University, China</p> <p><i>Timestamp-Free based Cooperative Clock Synchronization for Time-Sensitive Human-Machine Systems</i> <u>Haiyong Zeng; Long Tang; Shoulin Huang; Xiaohao Wen; Mengchu Zhou</u> Guangxi Normal University & Harbin Institute of Technology (Shenzhen), China</p>	<p><i>Numerical Simulations of Cross-Coupled Add-Drop Microring Resonator (XMRR) for Next-Generation Optical Interconnects</i> <u>Mae M Garcillanosa; Benjamin B Dingel; Jennifer Dela Cruz; Wayne Jasper G Sy; Ramon Benedict L. Lapiña; Jonathan L. Mojica; Jerome Fredrich M. Tayamora</u> Mapúa Malayan Colleges Laguna & Mapúa University, Philippines</p> <p><i>Deterministic Multi-Channel XPM Scalability in Octagonal-Core Nonlinear PCFs with Geometry Polarization and System-Level BER Limits</i> <u>Nidhi Singh; Yatindra Nath Singh</u> Indian Institute of Technology, Kanpur, India</p> <p><i>Optoelectronic Beamforming for Integrated Sensing and Communication</i> <u>Xiaofeng Su; Jian Song; Jintao Wang</u> Tsinghua University, China</p>	<p><i>Adaptive-Grid Residual KAN for Solving High-Dimensional PDEs with Deep BSDE (Invited Paper)</i> <u>Xiya Shen; Qinglin Zhao; Li Feng; Mengchu Zhou</u> Macau University of Science and Technology, China</p> <p><i>Identifying Comorbid Mental Disorders via Causal Multi-Label KNN (Invited paper)</i> <u>Tiantian Wang; Mengchu Zhou</u> Zhejiang Gongshang University, China</p> <p><i>Energy-Efficient Hybrid AI Tutor for Learning Varieties of English</i> <u>Cunqian You; Miao Wei; Xiaojun Wang; Huijuan Lu; Yu-Dong Yao</u> China Jiliang University, China</p> <p><i>Intent-Driven AI-Native Network Slicing for Rural Broadcasting over ATSC 3.0/B2X: A Reinforcement Learning Approach</i> <u>Harsh Sahu; Manas Sharma; Priyadarisini K; Preksha Shah; Rashmi Kamran; Leonard Joe Fabiano; Sangsu Kim</u> SRM Institute of Science and Technology, India</p>

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<p>W4 RIS, UAV & Next-Gen Network Infrastructure Chair: <i>Zhengxiang Ma</i> <i>Futurewei Technologies, USA</i></p>	<p>O4 Fiber System and Network Chair: <i>Xin Jiang</i> <i>City University of New York, USA</i></p>	<p>A4 AI Applications and Data-Driven Intelligence Chair: <i>Zhanyang Zhang</i> <i>City University of New York, USA</i></p>
<p style="text-align: center;"><i>CSI-RS Overhead Reduction in 6G</i> (Invited Paper) <u>Zhengxiang Ma, Zhigang Rong, Jialing Liu, Baoling Sheen, Ruikang Yang, Juan M. Roa, Renjian Zhao, Weimin Xiao, Miguel Dajer, Anthony C.K. Soong</u> Futurewei Technologies, USA</p> <p style="text-align: center;"><i>RIS Element Phase-Offset Calibration from RSRP Reports</i> (Invited Paper) <u>Narayan Prasad; Tao Luo; Meilong Jiang; Junyi Li</u> Qualcomm, USA</p> <p style="text-align: center;"><i>RIS-Assisted UAV Networks with Energy Harvesting and Data Collection</i> <u>Tassnim Mohamed; Liang Zhang</u> University of Maryland-Eastern Shore, USA</p>	<p style="text-align: center;"><i>The Frontier of In-door Networks: A Review of Fiber-To-The-Room (FTTR) Standards</i> (Invited Paper) <u>Zhicheng Ye; Jun Cheng; Yan Zeng; Xuming Wu; Shaozheng Yu; Yuanqiu Luo; Liang Zhang</u> Huawei Technologies Co. Ltd, China</p> <p style="text-align: center;"><i>Capacity Enhancement with Multicore Fibers for Next Generation Subsea Systems</i> (Invited Talk) <u>Govind Vedala</u> SubCom LLC, USA</p> <p style="text-align: center;"><i>Providing 10-Gigabit Optical Home Using 50G-Passive Optical Network and Fiber-to-the-Room</i> (Invited Paper) <u>Yuanqiu Luo; Frank Effenberger; Yan Zeng; Xuming Wu; Dekun Liu</u> Futurewei Technology, USA</p>	<p style="text-align: center;"><i>Modeling and Prediction Urban Floods with Wireless Flood Sensor Data Assimilation – A Machine Learning Approach</i> (Invited Talk) <u>Jason Liao; Zhanyang Zhang</u> City University of New York, USA</p> <p style="text-align: center;"><i>Sentiment Forecasting by Data-Driven Models</i> <u>Othoniel Joseph; Prathyusha Sukumar; Rayner Ulloa; Avimanyou K Vatsa; Alexander Casti</u> Fairleigh Dickinson University, USA</p> <p style="text-align: center;"><i>Empirical Analysis of Risk for Sports Facilities</i> <u>Neel Prajapati; Adarsh Dhorajjiya; Burhan Petiwala; Avimanyou K Vatsa; Alexander Casti</u> Fairleigh Dickinson University, USA</p>