

# IEEE HONET 2024

## IEEE 21<sup>st</sup> International Conference on Smart Communities: Improving Quality of Life Using AI, Robotics and IoT

University of Doha for Science & Technology, Doha, Qatar / Optoelectronics & Optical Comm., UNC  
Charlotte, USA / IEEE NC Council / IEEE Qatar Section

03-05  
December  
2024  
Doha, Qatar



جامعة الدوحة  
للعلوم والتكنولوجيا  
UNIVERSITY OF DOHA  
FOR SCIENCE & TECHNOLOGY



UNIVERSITY OF NORTH CAROLINA  
CHARLOTTE



Along with achieving its primary goal, HONET has been phenomenal in attracting quality research papers from around the world. The conference has been successful in gradually emerging as a focal point for research that targets local and global issues related to science and technology. The 21<sup>st</sup> International Conference HONET'2024 will continue to focus on Research and Development and use of legacy & emerging technologies for making Smart Cities and Communities a reality. Specifically, role of IoT and AI, data analytics, and intelligent energy production, distribution & storage along smart transportation systems will be explored in the technical sessions. As with the previous HONET events, we are expecting papers in the below-mentioned thematic areas and related emerging and enabling technologies.

### KEYNOTE AND INVITED SPEAKERS



Gordon Cheng, Ph.D.  
IEEE Fellow  
Technical University  
Munich, Germany



James Won-Ki Hong,  
Ph.D.  
Pohang University of  
Science and Technology  
(POSTECH), Korea



Mohammad  
Shahidehpour, Ph.D.,  
IEEE Fellow  
Illinois Institute of  
Technology, USA

### TOPICS

Researchers and Authors are invited to submit R&D and concept papers presenting original research work related to the practices and theory related to the theme and scope of HONET. The topics of interest include but not limited:

1. AI & IoT
  - a. Enhancing the capabilities of Smart Communities using AI
  - b. Machine Learning models for Smart Cities (LSTM, Deep Learning, Transformers)
  - c. Realizing Smart Localities using IoT
2. Robotics
  - a. Robotics & Automation
  - b. Autonomous Vehicles and Charging Technologies
  - c. Computer Vision
3. Computer and Communication Networks and Network Security
  - a. Wireless Networks
  - b. Photonic Networks
  - c. 5G Communication and beyond
  - d. Software Defined Networks (SDN)
  - e. Network Security and Forensic Analysis
4. Energy and Power Technologies
  - a. Renewable Energy Sources
  - b. Smart-Grids and Robust Infrastructure
  - c. Smart Storage and Demand & Response
  - d. Micro Grid Analytics and Management
  - e. Smart Grid and Smart Cities
5. Photonics
  - a. LEDs, Lasers and Solar Cells and Panels Packaging

### Symposiums Accepting Papers:

Smart City and IoT Applications to Urban Mobility (SCIAUM'24)  
Smart Sensing for e-Healthcare Applications using IoT, AI and ML Technologies

### Workshop Accepting Summaries:

Secure and Efficient AI on the Edge

### STEERING COMMITTEE

**M. Yasin Akhtar Raja**, SMIEEE, Optica and Fellow SPIE, Prof. Phys. & Optical Science, Optoelectronics & Optical Communication, UNC Charlotte, NC, USA

**Rachid Benlamri**, Prof. & VP Academics, University of Doha for Science & Technology, Doha, Qatar

**Glenn D. Boreman**, Prof. and Chair Physics & Optical Science, Fellow IEEE, SPIE and Optica, Dir. Center for Optoelectronics & Optical Communication, UNC Charlotte, USA

**Ian T Ferguson**, Prof. and Former Dean SPCEET, Fellow of IEEE, IOP and SPIE, Kennesaw State University, Kennesaw, GA, USA

### GENERAL CHAIRS

**Rachid Benlamri**, Prof. & VP Academics, University of Doha for Science & Technology, Doha, Qatar

**M. Yasin Akhtar Raja**, SMIEEE, Optica and Fellow SPIE, Prof. Physics & Optical Science, Optoelectronics & Optical Communication, UNC Charlotte, NC, USA

### CONFERENCE CHAIRS

**Zakaria Maamar**, Prof., University of Doha for Science & Technology, Doha, Qatar

**Mohammad Ilyas**, SMIEEE, Prof., EE & CS, Florida Atlantic University, Florida, USA

### IMPORTANT DATES

Full Papers/Short Papers: **31 Aug 2024**

Post Deadline/Symposium Papers: **10 Oct 2024**

Workshop Summaries: **30 Sep 2024**

Decision Notification: **End Oct for Post deadline papers**

*Post deadline and Symposium Papers to be notified end of Oct 2024*

Camera Ready and Registration

**30 September 2024**

Camera Ready and Registration

Post Deadline and Symposium Papers

**31 October 2024**

Program Available: **03 November 2024**