

## **Distinguished Speaker Series: Smart Cities for Promoting Global Sustainability**

Please join us for Distinguished Speaker Series  
**2:30-3:30PM on Thursday, November 16th in Main Classroom 201, Cleveland State University.**



### **Dr. Mohammad Shahidehpour**

Bodine Chair Professor of Electrical and Computer Engineering  
Director of the Robert W. Galvin Center of Electricity Innovation  
Illinois Institute of Technology, Chicago, IL 60616, USA

Fellow of IEEE

Fellow of the American Association for the Advancement of Science  
Member of the US National Academy of Engineering

### **Smart Cities for Promoting Global Sustainability**

A smart city will offer an integrated solution for managing a region's large and interdependent infrastructures including the electricity grid, natural gas supply system, telecommunication system, urban traffic and congestion management, smart vehicles including EVs, buses and urban trains, water supply system, waste water management, urban farming, smart street lights, municipal government system including urban security (physical/cyber) and public works. A smart city solution will enhance the efficiency of public services, meet city resident's critical needs, improved the quality of life, and promote the global sustainability. Accordingly, a smart city will be more prepared to respond to everyday challenges than a traditional monitoring system which considers a simple transactional relationship with individual citizens. A smart city is an urban (IoT) solutions in a secure fashion. The integrated smart city solution will enhance the performance and the interactivity of urban services, reduce costs, manage resource consumptions, and will ultimately improve security, reliability, resilience and sustainability in large metropolitan regions. The integrated solution will allow smart city officials to interact directly with community members and those in charge of critical infrastructures, in order to manage what is happening in the city, how the city functions are evolving, and how the city can enable a better quality of life in normal and stressed conditions. The information gathered through the use of smart sensors that are integrated with real-time monitoring systems is the key for mitigating inefficiencies in smart cities. The pertinent city data are collected, processed and then analyzed with the goal of improving the management of urban flows and allowing for real-time responses to unforeseen challenges. This presentation will introduce the components and the structures embedded in smart cities to discuss the benefits and the predicaments of implementing smart cities for promoting the global sustainability. An overview of the campus microgrid established at the IIT campus will also be presented.

#### **Register Here:**

[https://csuengineering.formstack.com/forms/distinguished\\_speaker\\_series\\_smart\\_cities\\_for\\_promoting\\_global\\_sustainability](https://csuengineering.formstack.com/forms/distinguished_speaker_series_smart_cities_for_promoting_global_sustainability)

#### **Parking & Directions**

[http://www.csuohio.edu/sites/default/files/media/about\\_csu/documents/campusmap.pdf](http://www.csuohio.edu/sites/default/files/media/about_csu/documents/campusmap.pdf)

#### **A Short Bio of Prof. Mohammad Shahidehpour:**

[https://www.csuohio.edu/engineering/sites/csuohio.edu.engineering/files/Mohammad\\_Shahidehpour\\_Bio.pdf](https://www.csuohio.edu/engineering/sites/csuohio.edu.engineering/files/Mohammad_Shahidehpour_Bio.pdf)