



# Northeastern University

## Electrical and Computer Engineering

### ECE FACULTY CANDIDATE



#### **Paolo Santi**

Principal Research Scientist  
MIT Senseable City Lab  
&  
Research Director  
Institute of Informatics and  
Telematics  
-CNR

#### **IoT: An Enabling Technology for Designing Better Cities**

Thursday, January 21  
11:30 AM – 12:30 PM

Zoom Link:  
<https://northeastern.zoom.us/j/96648819942>

**Abstract:** IoT is rapidly evolving into an enabling technology with countless potential applications. In this seminar, we will explore how IoT technology can help in the design of better cities, starting from the re-design of city systems and infrastructures (mobility, power grid, etc.) based on large-scale data acquisition. We will highlight the challenges related to systems where real-time actuation is a need, as well as those related to design problems where actuation occurs on a longer time scale, such as urban infrastructure planning. We will then show how IoT technology can be used also to gain a deeper understanding of how humans interact with existing urban systems. This deeper comprehension of human behavior is key to design systems that are not only “algorithmically” efficient, but that also conform to fundamental human behavioral patterns.

**Speaker bio:** Paolo Santi is Principal Research Scientist at MIT Senseable City Lab and Research Director at the Istituto di Informatica e Telematica, CNR, Pisa, Italy. Dr. Santi holds a "Laurea" degree and the PhD in computer science from the University of Pisa, Italy. Dr. Santi is a member of the IEEE Computer Society and has recently been recognized as Distinguished Scientist by the Association for Computing Machinery. His research interest is in the modeling and analysis of complex systems ranging from wireless multi hop networks to sensor and vehicular networks and, more recently, smart mobility and intelligent transportation systems. In these fields, he has contributed more than 160 scientific papers and two books.