



University of Pavia

Ph.D. Program of Electrical and Electronics Engineering and Computer Science

SEMINAR

Protocols for wireless sensor networks

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Northeastern University, Boston, MA

November 16th, 2015, h 16.00 – 18.00, room C6

Abstract: Being composed of many nodes, wireless sensor networks expose themselves to typical issues of multiple access and routing as the information can be forwarded to the collector (sink) node via multiple steps by choosing different paths. Selecting the most appropriate routing protocol must be performed considering the peculiarities of WSNs where nodes have limited energy resources and the path itself may change due to changing available nodes. In this seminar we will discuss such issues and describe some protocols specifically designed for WSNs. Topics covered:

- MAC protocol design: BMAC, CCA, SMAC
- Routing protocol design: Directed diffusion, SPIN, COUGAR, LEACH, Multipath routing
- Transport layer design: PSFQ, ESRT

Bio: Kaushik Chowdhury is Associate Professor in the Electrical and Computer Engineering Department at Northeastern University, Boston, MA, USA since 2009. He graduated with B.E. in Electronics Engineering with distinction from VJTI, Mumbai University, India, in 2003. He received his M.S. in Computer Science from the University of Cincinnati, OH, in 2006, and Ph.D. from the Georgia Institute of Technology, Atlanta, GA in 2009. His M.S. thesis was given the outstanding thesis award jointly by the ECE and CS departments at the University of Cincinnati. He received the Best Paper Award at the IEEE ICC Conference in 2009, 2012, 2013, as well as the Best Paper award in the ICNC Conference in 2013. His expertise and research interests lie in wireless cognitive radio ad hoc networks, energy harvesting, and intra-body communication. He is currently an area editor for the Elsevier Ad Hoc and Computer Communications journals, and the Chair for the IEEE Technical Committee on Simulation. He is the recipient of the 2015 NSF CAREER award.

Organizer

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Seminar in English

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