



Editor in Chief

I.F. Akyildiz
adhoc@ece.gatech.edu

Guest Editors

XiangYang Li xli@cs.iit.edu

YunHao Liu liu@cse.ust.hk

WenZhan Song
songwz@wsu.edu

My T. Thai
mythai@cise.ufl.edu

Important dates

Paper submission:
10-May-2010

Acceptance notification:
10-Sept-2010

Final papers:
10-Oct-2010

Publication:
10-Jan-2011 (adjustable to the editorial calendar)

Call for Papers

A Special Issue of Ad Hoc Networks Journal on Recent Advances in Large Scale and Sustainable Wireless Sensor Networks

The recent advances in embedded software/hardware design have enabled large-scale and cost-effective deployment of Wireless Sensor Networks (WSNs). Such a network consists of many small sensor nodes with sensing, computing, communicating, and controlling capabilities. The wireless sensor networks have a broad spectrum applications ranging from wild life monitoring, battlefield surveillance, to border control and disaster relief, and have attracted significant interests from both academy and industry. A wireless sensor node generally has limited communication and computation capabilities, as well as severely-constrained power supplies, and the networks often operate in harsh unattended environments. Successful design and deployment of wireless sensor networks thus call for technology advances and integrations in diverse fields, including embedded hardware design, data processing, and wireless communications and networking across all layers.

One of the key challenges in WSNs is to develop sustainable and scalable system that achieves longer network lifetime. Nodes capable of harvesting environmental energy have been designed and used in many WSN systems. The benefits of using rechargeable batteries by harvesting environmental energy to prolong sensor network lifetime have been well recognized.

This special issue aims to summarize the latest development of hardware and software for WSNs, as well as deployment experiences. Topics of interest include but are not limited to:

- Novel transport, network, and MAC protocol design
- Smart in-network processing and control
- Disruption-tolerant/opportunistic mobile sensor networking
- Cross layer design and optimization, duty cycle management
- Channel and network modeling and performance evaluation
- Measurements and experience from experimental systems and test-beds
- New and novel methods for harvesting environment energy
- Hardware design
- Novel applications and architectures

We solicit original unpublished research papers only. Papers previously published in conference/workshop proceedings can be considered, but should be substantially extended.



About the Ad Hoc Networks Journal

The Ad Hoc Networks is an international and archival journal providing a publication vehicle for complete coverage of all topics of interest to those involved in ad hoc and sensor networking areas. The Ad Hoc Networks considers original, high quality and unpublished contributions addressing all aspects of ad hoc and sensor networks.

Submission format

Submit full papers via automated paper submission system at <http://ees.elsevier.com/adhoc/>.

The papers must be less than twenty single-column double-spaced pages, excluding figures, tables, and references, using a 12-point font size.

For detailed formatting instructions, please refer to the guidelines available at the Ad Hoc Networks journal web site, <http://www.elsevier.com/locate/adhoc/>.

Submission Guideline

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select as “relevant SI Article type” when they reach the “Article Type” step in the submission process. The EES website is located at:

<http://www.elsevier.com/locate/adhoc/>

Guide for Authors

This site will guide you stepwise through the creation and uploading of your article. The guide for authors can be found on the journal homepage (<http://www.elsevier.com/locate/adhoc/>).