

Special Issue Announcement

Advances in Wireless Communications and Networking

Guest Editors

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Since its invention by Guglielmo Marconi in 1896, wireless communications technology has been developing at a very fast rate and today it has become the most exciting area in telecommunications and networking. Over the last century, advances in wireless technologies have led to the development of cellular mobile phones, communications satellites, wireless LANs etc. The emergence of wireless packet data applications (e.g., wireless web access, interactive and real-time mobile multimedia applications, wireless interactive gaming, client/server applications) is the key driver for the evolution of future-generation wireless systems from the current second-generation (2G)/third-generation (3G) systems. Future-generation wireless systems will enable us to communicate with any-one, anywhere, at any time using a range of multimedia services.

The unique characteristics of wireless communications systems such as physical limitations and impairments to radio channels (e.g., bandwidth constraints, channel fading, noise and interference), user mobility, limited battery power and limited computational resources of mobile devices pose significant challenges in designing high-speed wireless communication networks.

The emphasis of the special issue will be on advances in the state-of-the-art of wireless communications and networking technology. We solicit papers in the following three main categories - survey/tutorial, industrial/applications, and research/technical. The topics of interest include but are not limited to:

- Modulation and coding, detection and estimation, diversity and equalization techniques for wireless communications
- Propagation modeling and channel characterization, fading countermeasures for wireless systems
- Space-time processing and adaptive antennas for wireless systems
- Multiple access techniques for wireless communication networks
- Resource management in wireless networks
- Transport protocol design for wireless networks
- Location and mobility management in wireless communication networks
- Security, privacy and authentication in wireless systems
- Software radio
- Mobile computing
- DSP applications to wireless systems
- Mobile satellite and packet radio networks
- Experimental and prototype results
- Simulation tools for analysis, design and engineering of wireless communication networks
- Standardization activities

Only original and unpublished research articles (not being considered for publication anywhere else) will be considered. The paper should be no longer than 20 double-spaced pages, excluding illustrations and graphs (the maximum number of figures and tables is limited to 10). There will be one round of reviews only and acceptance will be limited to papers needing only moderate revisions. Prospective authors should submit a **pdf** version of their complete manuscript (as an email attachment), according to the following timetable, to anyone of the guest editors.

Schedule:

Start of Submission: **1 September 2003**
Submission Deadline: **30 October 2003**
Acceptance Notification: **30 December 2003**
Final Manuscript Due: **31 January 2003**
Publication Date: **1st quarter 2004**