

Recent Advances in Wireless Networking and Communications

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Wireless communications and networking have been receiving a lot of attention from the academic and industrial communities for the past few years. There has been a constant evolution of wireless systems over the years from the first generation to the current third generation wireless networks. Already, there is talk about the next generation networks and their goals and challenges ! Current and future generation wireless technologies will support bandwidth-hungry applications such as mobile multimedia communications for highly mobile users at high data rates. This brings-up various important issues to the forefront such as error-resilience, quality of service (QoS), resource management, security etc.

The aim of this special session is to bring together researchers and practitioners in wireless networking and communications under one forum to discuss the recent advances and future trends in these areas. It is our belief that this effort will be useful in presenting the state-of-the art in wireless systems to the research and development community.

Keeping in mind the rapid developments in wireless systems, this special session focuses on some of the key related issues. Specifically, the following topics were included in the call for papers (CFP) :

- low power wireless networking
- multiple access techniques
- coding and modulation techniques
- broadband wireless networking
- hardware for wireless applications
- QoS management in wireless networks

Our response to the CFP was very encouraging.

This session includes both invited and contributed papers addressing a broad variety of topics within the scope of ITCC. Papers range from low power implementation of

wireless communication systems to information theoretic capacity computation of wireless channels.

I would like to personally thank all the authors for accepting our invitation and contributing to this special session. I also thank the entire ITCC organizing committee, especially Heather Yu, for the constant support throughout this effort.

Looking forward to seeing you in Las Vegas.