

***The University of Alabama
Department of Computer Science
Colloquium Series Speaker***

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Medium Access Control in the Next Generation Mobile Ad Hoc Networks: Challenges & Open Issues

**Friday, August 22nd
2:00 p.m., HO 108**

Abstract:

In this presentation, we briefly overview one of the most challenging issues in mobile ad hoc networks (MANETs), the so-called 'Unreachability Problem.' We explain how this problem degrades the overall performance of the medium access control (MAC) protocol used for data communication in MANETs and subsequently, we propose a new approach to overcome this problem. We further proceed with the concept of smart multi-channel MAC protocols for cognitive ad hoc networks and draw our attention to the challenging problems one may encounter in such systems. We focus on multi-channel hidden problem, as well as multi-channel unreachability problem. We also present possible solutions to alleviate the impact of the above problems and emphasize on the current trend in wireless communications research community to deal with these challenges.

Bio:

Kaveh Ghaboosi received the B.Sc. degree in electrical engineering from the University of Tehran, Tehran, Iran, in 2002 and the M.Sc. degree in electrical engineering from Sharif University of Technology, Tehran, in 2004. He is currently working toward the Ph.D. degree with the Centre for Wireless Communications (CWC), University of Oulu, Oulu, Finland. His research interests include mobile computing, cognitive radios, and medium access control protocols for broadband wireless networks.