

EHSAN NOURBAKHSH, PH.D.

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Summary of Experience

- Wireless Networks (802.11, Bluetooth, ZigBee, LTE), Embedded Systems, IoT

Work Experience

- **Qualcomm Atheros**—San Jose
Staff Software Engineer 07/2013 - present
 - Wi-Fi firmware software development for coexistence with LTE/GSM/TD-SCDMA
 - Design and develop software features: owning feature and cross organization design, code development on emulation platform, bring-up on Snapdragon 835, and post-release fixes.
 - Work involves deep collaborations with modem and host driver using WLAN-core's event driven real time system.
- **Cisco Systems Inc.**—San Jose
Graduate Intern 05/2010 - 06/2010
 - Shortly worked with the Radio Resource Management (RRM) Group, Wireless Networking Business Unit (WNBU)
 - Focus: interference management and coexistence of enterprise Wi-Fi networks
- **Aria Rasana Tadbir**—Tehran
Software Engineer 08/2004 - 12/2006
 - Developed various software projects including remote control and debug of on-premises subscriber equipment, as well as management of the ADSL network nodes
- **Fraunhofer-Gesellschaft**—Darmstadt
Research Assistant 08/2003 - 09/2003
 - Focus: distributed systems for use of handheld mobile devices for education

Research Experience

- **Distributed Systems Lab, UT Dallas**—Richardson, TX
Research Assistant 01/2007 - 07/2013
 - Research: Mobile Ad-hoc Networks, Wireless Sensor Networks (Wi-Fi, ZigBee, IEEE 802.15.4, Bluetooth), Smart Grids
 - Development: implemented two fine grained 20+ node wireless testbeds on RTOS systems (TinyOS and custom FPGA hardware).
- **ADA Parallel Processing Lab, Sharif University of Technology**—Tehran
Research Assistant 08/2004 - 01/2006
 - Parallel Processing on ADA cluster, Web Compression and Search Engine Design.
- **Sharif Advanced ICT Research Center, Sharif University of Technology**—Tehran
Research Assistant 06/2001 - 08/2004

Education

- **The University of Texas at Dallas**—Richardson, TX
Ph.D. in Computer Science 01/2007 - 07/2013
 - Dissertation title: Wireless Sensor Networks for Monitoring Smart Grids-Design and Experimental Verification
 - Supervised by Professor R. Prakash, Distributed Systems Lab
- **Sharif University of Technology**—Tehran
B.Sc. in Computer Software Engineering 09/2000 - 02/2006
 - Thesis: A Hybrid Approach for Refreshing Web Repository
 - Supervised by Professor M. Ghodsi, ADA Parallel Processing Lab

Publications

- K. Subramani, J. Beshay, Niranjana Mahabaleshwar, Ehsan Nourbakhsh, et. al., "Wireless networking testbed and emulator (WiNeTestEr)," *Proceedings of the 17th ACM international conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, 2014
- Ehsan Nourbakhsh, Ravi Prakash, "ATR-MAC: Deadline Driven Data Collection from Smart Meters in Absence of Aggregation," *Proceedings of The 16th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, 2013
- Ehsan Nourbakhsh, Ryan Burchfield, S. Venkatesan, Neeraj Mittal, Ravi Prakash, "Enhancing ASSERT: Making an Accurate Testbed Friendly," *The 6th ACM International Workshop on Wireless Network Testbeds, Experimental evaluation and Characterization (WiNTECH)*, 2011
- Ravi Prakash, Ehsan Nourbakhsh, "Gradient-based Aggregation in Forest of Sensors (GrAFS)," *IEEE International Conference on Parallel Processing (ICPP)*, 2011
- Ehsan Nourbakhsh, Jeff Dix, Paul Johnson, Ryan Burchfield, S. Venkatesan, Neeraj Mittal and Ravi Prakash, "ASSERT: A Wireless Networking Testbed", *6th International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TridentCom)*, 2010
- Ravi Prakash, Ehsan Nourbakhsh, Kunal Sahu, "Data Aggregation in Sensor Networks: No More a Slave to ," *47th Annual Allerton Conference on Communication, Control, and Computing*, 2009 (invited)
- Ryan Burchfield, Ehsan Nourbakhsh, Jeff Dix, Kunal Sahu, S. Venkatesan, Ravi Prakash, "RF in the Jungle: Effect of Environment Assumptions on Wireless Experiment Repeatability," *Proceedings of the IEEE International Conference on Communications (ICC)*, 2009