

## **Xiaojing Yuan, Ph.D.**

Associate Professor, Engineering Technology, College of Technology  
Intelligent Sensor Grid and Informatics Lab, University of Houston  
713-743-1129, [xyuan@uh.edu](mailto:xyuan@uh.edu), [www.tech.uh.edu/isgrin](http://www.tech.uh.edu/isgrin)

### **A. Professional Preparation**

Hefei University of Technology of China,	Electrical Engineering,	B.S., 1994
University of Science and Technology of China,	Computer Engineering,	M.S., 1997
Tulane University,	Computer Science,	M.S., 2002
Tulane University,	Mechanical Engineering	Ph.D., 2003

### **B. Appointments**

University of Houston, Associate Professor, College of Technology,	Fall 2012 - Present
University of Houston, Assistant Professor, College of Technology,	Fall 2005 – Aug. 2012
University of Houston, Research Assistant Professor, College of Technology,	Aug. 2004~Aug. 2005.
Tulane University, Postdoctoral Researcher, Imaging Understanding Lab,	Aug. 2003~July 2004.

### **C. Relevant Products** (\* student author)

1. X. Yuan, H. Malki, G. Song, XH. Yuan, Developing System-Thinking Oriented Learning Modules of Networked Measurement Systems for Undergraduate Engineering Curriculum, Proceedings of Annual ASEE International Confernece, Atlanta, GA, June 2013.
2. X. Yuan, A. Moinzadeh\*, Y. Lu\*, D. Harden\*, XH. Yuan, Cross-Domain Integration of Home Automation, Entertainment, and e-Health using Wireless Sensor Network, Proceedings of Annual ASEE International Confernece, Atlanta, GA, June 2013.
3. X. Yuan, H. Malki, G. Song, An REU Experience with Wireless Sensor Networks Research, Proceedings of Annual ASEE International Confernece, Atlanta, GA, June 2013.
4. X. Yuan, N. Situ\*, G. Zouridakis, "Automated Melanoma Screening and Early Detection," Computer-Aided Cancer Detection and Diagnosis: Recent Advance, SPIE Press.
5. X. Yuan, W.Sun\*, D. Han\*, J. Wang, C. Zhang, and X. Yuan, "Chap 10 Quality of Service in Networking for Smart Grid," Communication and Networking in Smart Grid, Editor: Yang Xiao, CRC Press, May 2012.

### **D. Other Significant Products**

1. X. Yuan, N. Situ, G. Zouridakis, XH. Yuan, "Chapter 10 Automated Melanoma Screening and Early Detection," Computer-Aided Cancer Detection and Diagnosis: Recent Advance, SPIE Press, Dec. 2013.
2. X. Yuan, W.Sun, D. Han, J. Wang, C. Zhang, and X. Yuan, "Chap 10 Quality of Service in Networking for Smart Grid," Communication and Networking in Smart Grid, Editor: Yang Xiao, CRC Press, May 2012.
3. J.Han, F. Lin, X. Yuan, Z. Wei, D. Han\*, "Routing Protocol of probability-based shunting for load balancing in linear wireless sensor networks," Journal of Telecommunications Science, vol. 27, No. 4, pp. 87-90, 2011.
4. X. Yuan, N. Situ\*, G. Zouridakis, "A Narrow Band Graph Partitioning Method for Skin Lesion Segmentation", Pattern Recognition, vol. 42, issue 6, pp. 1017-1028.
5. M. Balakrishnan, D. Benhaddou, X. Yuan, D. Gurkan, "Channel Preemptive EDCA for Emergency Medium Access in Distributed Wireless Networks", IEEE Wireless Communication, Vol 8, Issue 12, Page(s): 5743-5748, December 2009.

### **E. Synergistic Activities**

1. Currently serving as PI and faculty mentor for the SETS (Succeed in Engineering Technology Scholars) program funded by NSF S-STEM from 2015-2020.

2. Served as PI of a NSF CCLI curriculum development project as well as PI of a NSF I-CorpsL project to identify the feasibility of expanding it through commercialization; Co-PI and faculty mentor for NSF REU-SITES from 2009-2011.
3. Served as faculty mentor for more than thirty senior project design teams in the computer engineering technology program since 2010.
4. Served as faculty mentor for the UH Cornell Cup Competition teams since 2011. All teams won Awards for the Technology Innovation and one team also won the Media Award for their social media savvy.
5. Served as mentor in UH-PALS program to help smooth freshmen transition to college; the GRADE program to attract high school girls to STEM fields.
6. Served as faculty advisor for the ISA (International Society of Automation) UH student chapter since 2006.
7. Developed active learning materials to introduce recent advances in wireless sensor networking to undergraduate measurement and instrumentation, funded by NSF and UH.
8. Served as technical reviewer for numerous technical journals and conference proceedings;
  - a. Served as grant reviewer for NSF, DoD, and NASA programs.
  - b. Member of ASEE, Senior member of IEEE and ISA.
  - c. Associate Editor of International Journal of Sensor Networks

## **F: Collaborators and Other Affiliations**

### **i. Collaborators in the last 48 months**

**University of Houston:** Gangbing Song, Heidar Malki, Driss Benhaddou, George Zouridakis

**University of North Texas:** Xiaohui Yuan

**National Instrument:** Igor Alvarado

### **ii. Thesis and Dissertation Advisors**

Dr. Fernando Figueroa, Ph.D. Advisor, Nasa SSC Center, MS.

Dr. Bill Buckles, M.S. Advisor, University of North Texas, Denton, TX.

### **iii. Graduate Students Advised:**

**MS Thesis Advising:** more than 30 M.S. graduates

**MS Thesis co-Advising:** Zhenyu Yang, Yi Liu, Chong Wang (Computer Science Department, UH)

**Ph.D. Dissertation co-Advising:** Wei Ding, Ning Situ (Computer Science Department, UH)