Shengrong Yin

311 Philip G. Hoffman Hall – Houston, Texas 77204-3010
+1(832)-274-1519 • syin@cs.uh.edu • syin.us

RESEARCH INTERESTS

Wireless Communication, Embedded Systems, Sensing Applications

EDUCATION

University of Houston — **Houston, USA**
Ph.D. student, *Computer Science* — *Aug. 2013 - present*

Wuhan University of Technology — **Wuhan, China**
M.S., *Electrical Engineering* — *Sep. 2011 - Jun. 2013*

Wuhan University of Technology — **Wuhan, China**
B.S., *Electrical Engineering* — *Sep. 2007 – Jun. 2011*

SELECTED PUBLICATIONS

- **Yin, S.**, Gnawali, O., Sommer, P., Kusy, B. "Multi Channel Performance of Dual Band Low Power Wireless Network", *Mobile Ad-Hoc and Sensor Systems (MASS), 2014 IEEE 11th International Conference on.* IEEE, 2014
- **Yin, S.**, Gnawali, O., Sommer, P., Kusy, B. "Poster Abstract: Concurrent Wireless Channel Survey on Dual Band Sensor Network Testbed", *Mobile Ad-Hoc and Sensor Systems (MASS), 2014 IEEE 11th International Conference on.* IEEE, 2014

PATENTS

- Li, F., Zhang, J., Liu, X., Jiang, L., **Yin, S.,** Qian, K., "Position and posture measuring system and method for mechanical equipment", CN102322857B **(granted)**

RESEARCH EXPERIENCE

University of Houston — **Houston, USA**
Research Assistant at the ***Networked Systems Laboratory*** — *Jan. 2014 - Present*

- Researched on Making Biochemical Threat Detection Economically Sustainable and co-developed a data acquisition system with multiple sensors using Raspberry Pi. 12/2014-03/2015
- Designed and implemented a WiFi to IEEE 802.15.4 sensor nodes communication system based on OpenWRT and TinyOS. 11/2014-03/2015
- Designed and implemented a BeagleBone Cape for an visual light communication system. 01/2015-02/2015
- Designed and prototyped a wearable device for dancers to capture and synchronize their dancing performance with acceleration data. 12/2015-01/2015
- Developed a system for wireless sensor network to procure and analyze the performance of network connectivity and system reliability. 04/2014-08/2014
- Built and debugged a distributed system for wireless sensor network testbed with servers, proxies and sensor nodes utilizing Python, Shell scripts based on Ubuntu 13.04. 01/2014-04/2014
- Validated and enabled a wireless sensor network testbed - Twonet to make it public for the academia usage. 12/2013-01/2014
- Investigated how soon the US government could update their websites during the gov't shutdown 2013 using Shell and Python scripts. 10/2013-11/2013
- Submitted research conclusion and accepted by **slashdot.org** 11/2013

Wuhan University of Technology — **Wuhan, China**
Undergraduate Research — *May. 2010 - Dec. 2011*

- Designed and implemented an adaptive navigating system for road header underground using C and C++. 05/2011-12/2011
- Designed and implemented a new platform with MSP430 and CC1101 radio stack which can be ported into TinyOS. 10/2010-05/2011
- Designed and implemented a wireless irrigation system with C8051 and nRF2401 to better precise the water-saving agriculture. 05/2010-08/2010

TEACHING EXPERIENCE

- **COSC 1304 :** C Programming — Summer 2014
- **COSC 1320 :** Introduction to Computer Science II — Spring 2014
- **COSC 1410 :** Introduction to Computer Science I — Fall 2013

INTERNSHIPS

IBM **Beijing, China**
Software Engineer Intern *Feb. 2013 - May. 2013*

- Unified and validated IBM Rational software engineering platform using Java, XML, Python and Shell.
- Designed and implemented automated and manual test cases for the deployment of IBM cloud services using IBM Rational Application Developer and bash scripts.
- Constructed and maintained the rapid continuous software development, test automation and delivery through IBM service visualization.

POTEVIO(China) **Luoyang, China**
Technical Engineer Intern *Oct. 2010 - Sep. 2010*

- Implemented and debugged a security alarm monitoring system using C++ and OpenCV.

SERVICE

- ACM IPSN 2015, shadow PC member

HONORS & AWARDS

- Student Travel Grant Award for **ACM SenSys 2014** 2014
- Student Travel Grant Award for **IEEE MASS 2014** 2014
- Graduate Student Scholarship at UH 2013-2014
- National Scholarship for Masters in China 2012
- Outstanding Graduates of Class 2011 at WUT 2011

COMPUTER SKILLS

- **Open Source:** Arduino, Raspberry Pi, BeagleBone, OpenWRT, TinyOS, Contiki, Linux/Unix
- **Programming:** C, C++, Python, Bash, Matlab, HTML
- **Typography:** LaTeX, Google Doc, MS Office

AFFILIATIONS & LEADERSHIP

- **Student Member** of IEEE 2014
- **Vice-Chairman** of the Radio Station at WUT 2009-2010
- **Member** of the Rollerblade Team of the Student Union at WUT 2007-2011

REFERENCES

Advisor:
Prof. Omprakash Gnawali
Department of Computer Science
University of Houston
gnawali@cs.uh.edu

Collaborator:
Dr. Philipp Sommer
Senior Researcher
ABB Corporate Research, Switzerland
philipp.sommer@csiro.au