Curriculum Vitae

SHIYU JI

August 27, 2015

1 BASIC INFORMATION

- Graduate Student, Department of Computer Science, Oklahoma State University
- Office: MSCS 314, Stillwater, OK 74075
- Website: http://cs.okstate.edu/~shiyu
- Email: shiyu AT cs.okstate.edu

2 RESEARCH INTERESTS

My research interests include game theories (i.e., incentive mechanisms) in the context of crowdsourcing and wireless networks.

3 EDUCATION

- PhD Student (2015-), Computer Science, UC Santa Barbara.
- M.S. (2012-2015), Computer Science, Oklahoma State University. GPA: 4.0/4.0. Advisor: Dr. Tingting Chen.
- B.E. (2008-2012), Information Security, Harbin Institute of Technology. GPA: 86.6/100.

4 PUBLICATIONS

- Conferences
 - 1. Shiyu Ji, Tingting Chen, Fan Wu. "Crowdsourcing with Trembles: Incentive Mechanisms for Mobile Phones with Uncertain Sensing Time", accepted by *IEEE ICC Mobile and Wireless Networking Symposium (ICC'15 MWN)*, London, June, 2015.
 - 2. Shiyu Ji, Tingting Chen, Sheng Zhong, Subhash Kak. "DAWN: Defending Against Wormhole Attacks in Wireless Network Coding Systems", accepted by *IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April, 2014.
 - 3. Shiyu Ji, Tingting Chen. "Crowdsensing Incentive Mechanisms for Mobile Systems with Finite Precisions", accepted by *IEEE ICC Mobile and Wireless Networking Symposium (ICC MWN)*, Sydney, June, 2014.

• Journals

1. Shiyu Ji, Tingting Chen, "Incentive Mechanisms for Discretized Mobile Crowdsensing", accepted by *IEEE Transactions on Wireless Communications*, 2015.

- 2. Shiyu Ji, Tingting Chen, Sheng Zhong. "Wormhole Attack Detection Algorithms in Wireless Network Coding Systems", *IEEE Transactions on Mobile Computing (TMC)*, Vol. 14, Issue 3, 2015.
- 3. Shiyu Ji, Xiaojun Tong, Miao Zhang. "Image encryption schemes for joint photographic experts group and graphics interchange format formats based on three-dimensional baker with compound chaotic sequence generator". *Journal of Electronic Imaging*, Vol. 22, No. 1, 2013.

5 EXPERIENCE

• Research Assistant (06/2013-08/2013) at Oklahoma State University.

Advisor: Dr. Tingting Chen.

Topics: Expected Transmission Count (ETX) as countermeasure against wormhole attacks; Sensing uncertainty and discretized sensing in crowdsourcing/crowdsensing; Collusion resistance in crowdsourcing.

• Teaching Assistant (08/2012-Present) at Oklahoma State University (OSU).

Jobs: I graded for the courses Data Structures and Algorithms, Formal Languages, Numerical Analysis, Wireless Networks and Security Algorithms for undergraduate students in OSU.

I also prepared the introductory slides of ns3 and crypto++ at the graduate level course in Fall, 2013 and Spring 2014, respectively.

I gave 7 lectures on Heapsort, Hash tables and Binary Search Trees to the undergraduate students in Spring, 2015.

• Research Assistant (11/2011-05/2012) at Harbin Institute of Technology.

Advisor: Prof. Xiaojun Tong.

Topics: Chaotic image encryption on various graphic formats, e.g., JPEG, GIF, etc.

6 HONORS AND AWARDS

- Fisher Scholarship, Computer Science Department, Oklahoma State University, 2014.
- Honorable Mention, Mathematical Contest in Modeling (MCM) (top 25%), 2011.
- First Class Scholarships of Harbin Institute of Technology (top 5%), 2008-2011.
- Excellent Graduate of Harbin Institute of Technology (top 10%), 2012.
- Excellent Student of Harbin Institute of Technology (top 5%), 2011.
- First Prize, Chinese High School Physics Competition (top 5%), 2007.