

He Wang

Department of Computer Science
Purdue University
Lawson Computer Science Building 3154L
305 N University Street
West Lafayette, IN 47907, USA

hw@purdue.edu
765-494-8469
<https://www.cs.purdue.edu/homes/hw/>

- APPOINTMENTS** **Purdue University,** Aug. 2016 - present
Assistant Professor, Department of Computer Science
- EDUCATION** **University of Illinois at Urbana-Champaign, USA**
Ph.D., Electrical and Computer Engineering, *Aug. 2016*
- Duke University, USA**
M.S., Electrical and Computer Engineering, *Sept. 2013*
- Tsinghua University, China**
B.E., Electronic Engineering, *Jul. 2011*
- INDUSTRY** **Microsoft Research, Redmond** May 2013 - Aug. 2013
EXPERIENCE *Research Intern*
Conducting research on a sensor-based user authentication system. In EWSN 2015.
- Microsoft Research, Redmond** May 2012 - Jul. 2012
Research Intern
Conducting research on a system to characterize local business ambience. In WWW 2014.
- Microsoft Research, Asia** Jul. 2010 - Jan. 2011
Research Intern
Conducting research on energy-efficient outdoor localization. In IEEE INFOCOM 2013.
- Microsoft Research, Asia** Jan. 2010 - Apr. 2010
Research Intern
Conducting research on energy-efficient and high accuracy location-based reminder.
- MEDIA** **MoLe:** Daily Mail, Sina News, Yahoo News, The Times of India, News.com.au, Bangkok Post, ...
COVERAGE **Bing Now 2.0:** MIT Technology Review
- InSight:** LA Times, CNET, San Francisco Chronicle, NewScientist, Sina, The Verge, Engadget, ...
- UnLoc:** Scientific American, The Verge, Gizmag, TG Daily, News Observer, PhysOrg, ...
- PUBLICATIONS** S. Shen, H. Wang, R. Roy Choudhury
I am a Smartwatch and I can Track my User's Arm
ACM MobiSys 2016 (acceptance ratio - 16%)
- H. Abdelnasir, R. Samir, A. Elgohary, M. Alzantot, H. Wang, S. Sen, R. Roy Choudhury, M. Youssef
SemanticSLAM: Using Environment Landmarks for Unsupervised Indoor Localization
IEEE Transactions on Mobile Computing 2016
- H. Wang, T. T. Lai, R. Roy Choudhury
MoLe: Motion Leaks through Smartwatch Sensors
ACM MobiCom 2015 (acceptance ratio - 18%)
- H. Wang, X. Bao, R. Roy Choudhury, S. Nelakuditi
Visually Fingerprinting Humans without Face Recognition
ACM MobiSys 2015 (acceptance ratio - 13%)

- H. Wang, D. Lymberopoulos, J. Liu
Sensor-based User Authentication
EWSN 2015 (acceptance ratio - 21%)
- N. Roy, H. Wang, R. Roy Choudhury
I am a Smartphone and I can Tell my User's Walking Direction
ACM MobiSys 2014(acceptance ratio - 14%)
- H. Wang, D. Lymberopoulos, J. Liu
Local Business Ambience Characterization Through Mobile Audio Sensing
WWW 2014 (acceptance ratio - 13%)
- H. Wang, X. Bao, R. Roy Choudhury, S. Nelakuditi
InSight: Recognizing Humans without Face Recognition
ACM HotMobile 2013 (acceptance ratio - 31%)
- H. Wang, Z. Wang, G. Shen, F. Li, S. Han, F. Zhao
WheelLoc: Enabling Continuous Location Service on Mobile Phone for Outdoor Scenarios
IEEE INFOCOM 2013 (acceptance ratio - 17%)
- H. Wang, S. Sen, A. Elgohary, M. Farid, M. Youssef, R. Roy Choudhury
No Need to War-Drive: Unsupervised Indoor Localization
ACM MobiSys 2012 (acceptance ratio - 18%)

**POSTERS AND
DEMOS**

- H. Wang, S. Sen, A. Mariakakis, A. Elgohary, M. Farid, M. Youssef, R. Roy Choudhury
Video: Unsupervised Indoor Localization (UnLoc): Beyond the Prototype
ACM MobiSys 2014
- H. Wang, X. Bao, R. Roy Choudhury, S. Nelakuditi
Demo: Recognizing Humans without Face Recognition
ACM MobiSys 2014
- N. Roy, H. Wang, R. Roy Choudhury
Demo: I am a Smartphone and I can Tell my User's Walking Direction
ACM MobiSys 2014
- H. Wang, S. Sen, A. Mariakakis, A. Elgohary, M. Farid, M. Youssef, R. Roy Choudhury
Demo: Unsupervised Indoor Localization
ACM MobiSys 2012

PATENTS

- User-Authentication Gestures
Patent granted. US 9223955 B2
- Unsupervised Indoor Localization and Heading Direction Estimation
Patent pending. US 20150281910 A1
- Accumulation of Real-time Crowd Sourced Data for Inferring Metadata about Entities
Patent pending. US 20140201276 A1

TEACHING

- CS 53600: Data Communication and Computer Networks, Spring 2017.
CS 59000-MS: Mobile Sensing, Computing, and Applications, Fall 2016.

**PROFESSIONAL
ACTIVITIES**

- TPC member:**
MobiCom 2017
IEEE SECON 2017
NetGames 2017
MobiVR 2017
SCIE 2017
- ERC member:**
MobiSys 2017

Reviewer:

ACM IMWUT

CHI 2017

UbiComp 2016

IEEE Transactions on Mobile Computing

IEEE/ACM Transactions on Networking

ACM Transactions on Sensor Networks

IEEE Pervasive Computing

IEEE Transactions on Parallel and Distributed Systems

IEEE Transactions on Emerging Topics in Computing

IEEE Transactions on Industrial Informatics

IEEE Transactions on Human-Machine Systems

IEEE International Conference on Communications (ICC) 2013

IEEE Journal on Selected Areas in Communications

Sensors

Journal of Ambient Intelligence and Humanized Computing

Computers in Biology and Medicine