

HONG LI

School of Interactive Computing
Georgia Institute of Technology
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EDUCATION

Georgia Institute of Technology, Atlanta, USA

AUG 2017 - present

Doctor of Philosophy, Computer Science

Area: Ubiquitous Computing, Applied Deep Learning, Applied Machine Learning

Advisor: Prof. Thomas Ploetz and Prof. Gregory D. Abowd

University of Science and Technology of China, Hefei, China

SEP 2014 - present

Master of Engineering Degree, Software Engineering

Area: Human-Computer Interaction, Systems and Networking

Advisor: Prof. Liusheng Huang

Overall GPA: 85/100

Hohai University, Nanjing, China

SEP 2010 - JUN 2014

Bachelor of Engineering Degree, Computer Science and Technology

Advisor: Prof. Zhenming Chen

Overall GPA: 86/100

RESEARCH

Eating Detection using Wearable Sensor Data

Sep 2017 - present

- Applying deep learning models to identify eating activities such as intake gestures, chewing, etc.
- Supervised by Prof. Thomas Ploetz and Prof. Gregory D. Abowd

Towards a correlation of word count, speech prosody and lung health

Sep 2017 - present

- Extracting acoustic signals from mobile phone.
 - Identifying the sound pronounced by children.
 - Attempting to judge their lung function via their pronunciation over time.
- Supervised by Dr. Rosa Arriaga

Finger-grained Gesture Recognition Using WiFi Signals

JAN 2016 - present

Project Leader

Suzhou, China

- Extracting channel state information from physical layer.
 - Applying the extracted data to identify finger-grained gestures.
 - Attempting to realize text input using recognized finger gestures.
- Supervised by Prof. Liusheng Huang and A/Prof. Wei Yang

Human Activity Recognition under Wireless Environment

SEP 2015 - DEC 2015

Project Leader

Suzhou, China

- Proposed a novel scheme using WiFi signals to sense human motions.
 - Extracted both frequency domain and time domain features to identify human activities.
 - Recognized 7 daily human activities with an average accuracy over 85%.
- Supervised by Prof. Liusheng Huang and A/Prof. Wei Yang

Motion Recognition Technology Research in Indoor Environment SEP 2014 - AUG 2015
Project Leader *Hefei, China*

- Investigated different schemes to identify indoor human movement.
 - Built experiment platform to capture wireless signals.
 - Tested the potential of recognizing human motions using wireless signals.
- Supervised by Prof. Liusheng Huang and A/Prof. Wei Yang

Research on Mathematical Modeling Methods SEP 2011 - MAY 2013
Research Assistant *Nanjing, China*

- Applied various models and methods to solve specific problems including market price prediction, criminal pattern analysis and cost computation of city bus network.
 - Joined research activities involve discussion, investigations in groups, presentations by students, and peer evaluations of each other's writings.
- Supervised by Prof. Zhenming Chen and Dr. Jianyong Zhang

PUBLICATIONS

- [C.1] **Hong Li**, Wei Yang, Jianxin Wang, Yang Xu, Liusheng Huang. WiFinger: Talk to Your Smart Devices with Finger-grained Gesture. The 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2016), pp. 250-261, 2016. **(Best Paper Award, Top 1%)**
- [C.2] **Hong Li**, Wei Yang, Yang Xu, Jianxin Wang, Liusheng Huang. WiCare: A Synthesized Health-care Service System Based on WiFi Signals. The 14th International Conference on Service Oriented Computing (short paper, ICSOC 2016), pp. 557-565, 2016.
- [C.3] **Hong Li**, Wei Yang, Yang Xu, Jianxin Wang, Liusheng Huang. A Real Time Wireless Interactive Multimedia System. The 18th Asia-Pacific Web Conference (APWeb 2016), pp. 53-65, 2016.

PATENTS

- [P.1] Wei Yang, **Hong Li**, Liusheng Huang, Jianxin Wang, Yang Xu. A Gesture Control Human-Computer Interaction System Based on WiFi Signals. CHN Patent: 201610198331X.

HONORS AND AWARDS

| | |
|-------------|--|
| 2017 | Outstanding Graduate in Anhui Province (less than 1% from all graduate students) |
| 2017 | Outstanding Graduate at USTC (less than 3% from all graduate students) |
| 2016 | Best Paper Award at the ACM International Conference on Ubiquitous Computing (Top 1%) |
| 2016 | 1 st Prize of Excellent Internships and Practice, USTC |
| 2016 | Suzhou Industrial Park Scholarship, USTC |
| 2016 | 1 st Class Academic Excellence Scholarship for Graduate Students, USTC (Top 3%) |
| 2014, 2015 | 2 nd Class Academic Excellence Scholarship for Graduate Students, USTC (Top 5%) |
| 2013 | 3 rd Prize of Software Design Competition in Jiangsu Province |
| 2012 | Outstanding Student in Talented Program, HHU (Top 1%) |
| 2012 | Hohai Scholarship for Scientific and Technological Innovation (Top 5%) |
| 2012 | Hydraulic Scholarship for Undergraduate Student, HHU |
| 2012 | 2 nd Prize of Certificate Authority Cup Mathematical Contest in Modeling |
| 2011 | 3 rd Prize of Mathematical Contest in Modeling (MCM) |
| 2011 | 3 rd Prize of The Electrician Mathematical Contest in Modeling |
| 2011, 2013 | 2 nd Prize of National College Students English Competition |
| 2011 | Outstanding Volunteer of Shenzhen 26th Summer Universiade, Shenzhen, China |
| 2010 – 2014 | Hohai Scholarship for Outstanding Academic, HHU (consecutive 4 years, Top 3%) |

STANDARDIZED TESTS

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| SEP, 2016 | TOEFL (iBT) Grade: 97 (Reading 29 Listening 21 Speaking 23 Writing 24) |
| JUL, 2016 | GRE (revised) Grade: Verbal 153, Quantative 165, Analytical Writing 4.0 |

TECHNICAL STRENGTHS

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|-------------------------------|---|
| Operating Systems | Windows, Linux, Android, Windows Mobile |
| Computer Languages | C++, Python, Java, C# |
| Scientific Application | Matlab, Latex |

ACTIVITIES

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| 2015 – present | Leader of Prof. Liusheng Huang's WiX Team, USTC |
| 2014 – 2015 | Vice-president of Graduate Student Union, USTC |
| 2011 | RPIS Engineer in Shenzhen 26th Summer Universiade, Shenzhen, China |
| 2010 – 2014 | Class commissary in charge of Academic, HHU |
| 2010 – 2014 | Member of the Talented Program, HHU |
| 2010 – 2014 | Member of the Youth Volunteer Service Team, HHU |