Xiong Zhang

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Education

University of Rochester, US — Sep 2015 – Present
Ph.D. Student in Computer Science, Advisor: Philip Guo

Harbin Institute of Technology, China — Sep 2013 – July 2015
M.S. in Computer Science, Advisor: Haifeng Li

Harbin Institute of Technology, China — Aug 2009 – July 2013
B.S. in Computer Science

Tsinghua University, China — Sep 2010 – Feb 2011
Exchange in Computer Science

Publications

- *(Honorable Mention)* **Xiong Zhang**, Philip J. Guo: *DS.js: Turn Any Webpage into an Example-Centric Live Programming Environment for Learning Data Science*. ACM Symposium on User Interface Software and Technology (UIST), 2017
- **Xiong Zhang**, Min Wang, Lijuan Wang, Qiang Huo and Haifeng Li: *Building Handwriting Recognizers by Leveraging Skeletons of Both Offline and Online Samples*. International Conference on Document Analysis and Recognition (ICDAR), 2015

Industry Experience

Information Bot for Events — Fuse Lab of Microsoft Research Redmond
Mentors: Will Portnoy, Lars Liden, Andres Monroy-Hernandez — *Jun 2016 – Aug 2016*

- Built an information bot for the BumberShoot event in Seattle using Microsoft Bot Framework, available on both Facebook Messenger and SMS.

Offline Handwriting Recognition — Speech Group of Microsoft Research Asia
Mentors: Lijuan Wang, Qiang Huo, Frank Soong — *Apr 2014 – June 2015*

- Made the first effort to build a recognizer for cursive human handwriting in Microsoft Research.
- Implemented an offline handwriting system based on Bidirectional Long Short-Term Memory & Hidden Markov Model hybrid structure, the system achieves comparable results with state-of-the-art systems on the IAM database.
- Proposed the method to mix skeletonized online handwriting data with offline handwriting data to enlarge the training set, which further improves the recognition accuracy.

Audio Visual Speech Recognition — Speech Group of Microsoft Research Asia
Mentors: Lijuan Wang, Frank Soong — *Dec 2012 – Aug 2013*

- Developed a method to fuse visual features (dimension reduced mouth image pixels by PCA) with audio features to improve speech recognition accuracy in videos.
- Made the first effort to build large audio-visual speech database from MOOC platforms, which included 5 hours high quality audio visual speech data.
- Implemented an audio-visual speech recognition system based on Deep Neural Network & Hidden Markov Model hybrid structure on the collected audio-visual database.

Skills

Programming: Python, C, C++, Java, Matlab, PHP, JavaScript

Musical Instruments: Acoustic guitar and similar string instruments like ukulele and bass.

Honors & Awards

- Outstanding Masters Thesis Award, 2014, Harbin Institute of Technology
- First Class Graduate Fellowship, 2013 & 2014, Harbin Institute of Technology
- First Class People's Scholarship, 2010, Harbin Institute of Technology