

# Xiong Zhang

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## EDUCATION

University of Rochester, US Ph.D. Student in Computer Science, Advisor: Philip Guo	SEP 2015 – PRESENT
Harbin Institute of Technology, China M.S. in Computer Science, Advisor: Haifeng Li	SEP 2013 – JULY 2015
Harbin Institute of Technology, China B.S. in Computer Science	AUG 2009 – JULY 2013
Tsinghua University, China Exchange in Computer Science	SEP 2010 – FEB 2011

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## RESEARCH & ENGINEERING PROJECTS

**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.

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## PUBLICATIONS

- **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

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## SKILLS

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

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

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## 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