

# Zhuang Li

Sydney, Australia  
lizhuang144@gmail.com

## Education

### **University of Sydney (USYD)**

*Doctor of Philosophy, Artificial Intelligence*

Research Topic: Pre-training for the Semantic Parsing

Sydney, Australia

02/2019 – current

### **The Australian National University**

*Master of Computing (Advanced), Artificial Intelligence*

Master's Thesis: Representation Learning for Weakly Supervised Relation Extraction

Canberra, Australia

02/2014 – 12/2015

### **Wuhan University of Science and Technology**

*Bachelor of Engineering, Electrical Engineering*

Wuhan, China

09/2009 – 06/2013

## Experience

### **Microsoft Search Technology Center Asia (STCA)**

*Software Development Engineer*

Suzhou, China

06/2017 – 12/2018

- Developed a semantic parsing-based factoid question answering system.
- Built a probabilistic taxonomy for the text understanding.
- Maintaining the language understanding components, including the domain and intent classification models and the slot tagging models, in Cortana question answering system and Bing search engine.
- Working on the new Cortana chat-bot framework design and implementation.

### **Hong Kong Applied Science & Technology Research Institute (ASTRI)**

*Engineer (Cloud Computing)*

09/2016 – 06/2017

- Conducted research on machine learning approaches for the time series prediction.
- Designed and implemented machine learning algorithms for the trading strategy generation and portfolio management.

### **Wuhan University**

*Visiting Student*

Wuhan, China

07/2016 – 08/2016

- Worked on improving the Twitter semantic similarity system using the neural probabilistic language model and unsupervised representation learning approaches.

### **National ICT Australia Ltd (NICTA)**

*Visiting Student*

Canberra, Australia

03/2015 – 06/2016

- Conducted master's thesis research.
- Helped develop NICTA's private deep learning toolkit DL-IE which includes common deep learning algorithms for natural language processing tasks.
- Worked on improving the performance of relation extraction systems using various deep neural relation extraction models and unsupervised representation learning approaches.
- Resulted in one article published in the Workshop of The Australasian Language Technology Association.

## Publications

Li, Z., Qu, L., Xu, Q., & Johnson, M. (December 5<sup>th</sup>, 2016). Unsupervised Pre-training with Sequence Reconstruction Loss for Deep Relation Extraction Models. *Workshop of The Australasian Language Technology Association*.

Liu, H., Chen, K., & Li, Z., etc. (April 24<sup>th</sup>, 2013). Design and Implementation of Information Processing System based on STM Single Chip Microprocessor. *Information Technology*.

Huang, Q., Liu, B., Li, Z. (December 25<sup>th</sup>, 2012). Multi-focus Image Fusion Method based on Three Channels Non-separable Symmetrical Wavelets. *Journal of Hubei University*.

## **Programming Languages**

Java  
Python  
C/C++  
Scala  
Latex  
Html

## **Skills**

Machine Learning Application Development  
Natural Language Processing Application Development  
Relational and NoSQL Database  
Concurrent and Distributed Computing  
Web Development  
Algorithm and Data Structure

## **Awards**

IEEE Xtreme Programming Competition 8.0    The Australian National University  
Team Rank: Australia – 2<sup>nd</sup>, World – Top 100    10/2014

## **Languages**

English (Advanced)  
Mandarin (Native Speaker)

## **Github Link**

<https://github.com/zhuang-li>