# YANYAN ZOU

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#### EDUCATION

<b>Ph.D. student in Computer Science</b> (Natural Language Processing) Singapore University of Technology and Design, Singapore Advisor: Wei Lu	Mar. 2017 - Present
<b>Ph.D. student in Computer Science</b> (Data Integration) Singapore University of Technology and Design, Singapore Advisor: Meihui Zhang	Sept. 2015 - Feb. 2017
<b>B.Eng in Electronic Engineering</b> Xiamen University, China Graduated with <b>Outstanding Graduate Award</b> <b>ACADEMIC EXPERIENCE</b>	Sept. 2011 - Jun. 2015
Research Intern, Microsoft Research Asia, China Mentor: Dr. Xingxing Zhang Topic: Document Summarization	Jun. 2019 - Present
Visiting Student, Peking University, China Advisor: Prof. Xu Sun Topic: Knowledge Graph Completion	Dec. 2018 - May 2019
Research Assistant, Singapore University of Technology and Design, Singapore Advisor: Prof. Wei Lu Topic: Semantic Parsing, Text Application	Mar. 2017 - Present
Research Assistant, Singapore University of Technology and Design, Singapore Advisor: Prof. Meihui Zhang Topic: Database (Data Integration)	Sept. 2015 - Feb. 2017

## PUBLICATIONS

Text2Math: End-to-end Parsing Text into Math Expressions. Yanyan Zou and Wei Lu. In *Proc. of* EMNLP, 2019.

Aligning Cross-lingual Entities with Multi-Aspect Information Yanyan Zou<sup>\*</sup>, Hsiu-Wei Yang<sup>\*</sup>, Peng Shi<sup>\*</sup>, Wei Lu, Jimmy Lin and Xu Sun. In *Proc. of* **EMNLP**, 2019 (*oral*).

Incorporating Fine-grained Events in Stock Movement Prediction Deli Chen, **Yanyan Zou**, Xuancheng Ren, Ruihan Bao, Keiko Harimoto and Xu Sun. In *Proc.* of **EMNLP-ECONLP** 2019.

Quantity Tagger: A Latent-Variable Sequence Labeling Approach to Solving Addition-Subtraction Word Problems **Yanyan Zou** and Wei Lu. In *Proc. of* **ACL**, 2019.

Joint Detection and Location of English Puns Yanyan Zou and Wei Lu. In *Proc. of* NAACL, 2019 (*oral*). Learning Cross-lingual Distributed Logical Representations for Semantic Parsing. **Yanyan Zou** and Wei Lu. In *Proc. of* **ACL**, 2018 (*oral*).

CLTR: Collectively Linking Temporal Records Across Heterogeneous Sources. **Yanyan Zou** and Perera S. Kasun. In *Proc. of* **DASFAA**, 2017.

#### PROJECT EXPERIENCE

Financial News for Stock Prediction

- Combined syntax and semantic evidence to make stock movement prediction;
- Applied pre-trained contextual embeddings and summarization methods to distilling knowledge from the noisy financial news, which helps make forex predictions.

Knowledge Graph

- Adopted neural networks with GCNs and BERT to align multilingual knowledge graphs;
- Constructed a neural model to mine commonsense facts from the physical world which can be further used to complete commonsense knowledge bases.

Text Application

- Studied the property of addition-subtraction arithmetic word problems and solved them by a sequence labeling approach;
- Designed a model that addresses both arithmetic word problem solving and equation parsing from a structure prediction perspective;
- Implemented a neural model for detecting and locating English puns in a joint manner.

Semantic Parsing

- Proposed an algorithm to parse a sentence into its meaning representation by finding the most informative words residing in the sentence, which achieves the time complexity linear to the text length;
- Proposed to learn distributed representations of logic forms containing shared cross-lingual information.

# HONORS & AWARDS (SELECTED)

SUTD President's Graduate Fellowship, SUTD, Singapore	2015 - Present
Outstanding Student (1st-class), XMU, China 20	15,2014,2013,2012
Outstanding Graduate Student (1st-class), XMU, China	2015
Excellent Student Scholarship (top 5%), XMU, China	2015
Academic Innovation Scholarship, XMU, China	2015
National Scholarship (top $2\%$ ), MOE of the PRC, China	2014
National Motivational Scholarship (top 5%), MOE of the PRC, China	$2013,\!2012$
Honorable Mention, Mathematical Contest in Modeling, USA	2014
1st prize, Fujian, National Mathematical Modeling Contest, China	2013

# SKILLS

**Computer**: Java, Python, Machine Learning, Deep Learning, PyTorch, TensorFlow **Language**: English (Professional Proficiency), Chinese (Native) MySQL, Statistics

## SERVICES

Reviewer for NLPCC 2017, EMNLP 2018, IJCAI 2019

Teaching assistant for 50.008 Database (UG course), SUTD

Teaching assistant for 50.034 Introduction to Probability and Statistics (UG course), SUTD