Zhanming (Allan) Jie

allan@bytedance.com | allanj.github.io | Github: allanj | Last update: May 10, 2022

Research Interest

Structured Prediction in NLP, Multi-modal Question Answering, Neural Symbolic Reasoning

EDUCATION

Singapore University of Technology and Design

2016 - 2020

PhD of Computer Science

- Supervisor: Prof. Wei Lu
- Thesis: "Leveraging Dependency Trees for Structured Prediction" (Best Thesis Award)

The Hong Kong University of Science and Technology

2014 - 2015

Doctoral Program

• Supervisor: Prof. James She

University of Electronic Science and Technology of China

2010 - 2014

Bachelor of Engineering

• GPA - 3.91/4, Department Ranking: 6/193

Professional Experience

Senior NLP Scientist, ByteDance AI Lab

May 2022 - Present

• Mentors: Hang Li

Singapore

• Research Area: multi-modal QA and symbolic reasoning

NLP Scientist, ByteDance AI Lab

May 2020 - May 2022

• Mentors: Hang Li and Wei Lu

Singapore

• Research Area: natural language understanding and multi-modal QA

NLP Research Intern, DAMO Academy, Alibaba

Novembe 2019 – May 2020

• Mentor: Lidong Bing

Singapore

• Research Area: Low-resource named entity recognition

NLP Research Intern, Allen Institute for Artificial Intelligence

June 2019 – Sept 2019

• Supervisor: Pradeep Daisg & Ana Marasovic

Washington

• Research Area: Question Answering with Coreferential Knowledge

Research Intern, Singapore University of Technology and Design

Feb 2014 – May 2014

• Mentor: Prof. Wei Lu

Singapore

• Research Area: Multilingual Semantic Parsing

Research Assistant, Shanghai Jiao Tong University

 $Dec\ 2013-Feb\ 2014$

• Mentor: Prof. Yaohui Jin

China

• Research Area: Cyber Attack in Cloud Computing

Professional Service

Structured Prediction Framework

https://github.com/allanj/pytorch_neural_crf

Active Maintainer

PC/Reviewer for Conference and Journal

- ACL ARR Rolling Review, ACL 2022, ACL 2021, EMNLP 2021, ACL 2020, EMNLP 2020, NLPCC 2020, AAAI 2019, EMNLP 2019, NAACL 2019, EMNLP 2018, PACLIC 2018, IJCNLP 2017, NLPCC 2017
- IEEE Transactions on Emerging Topics in Computing, Transactions on Asian and Low-Resource Language Information Processing, Natural Language Engineering, Computational Linguistic

Awards

Best PhD Thesis Award, SUTD	Apr 2020
Student Scholarship Award, AAAI-2017	Feb 2017
SUTD President's Graduate Fellowship, SUTD	2016 - 2020
Research Travel Grant, HKUST	Jul 2015
Postgraduate Studentship, HKUST	2014 - 2015
Outstanding Volunteer, Zhongshan, Guangdong, China	$\mathrm{Aug}\ 2014$
Excellent Graduation Thesis and Excellent Graduate Student, UESTC	Jul 2014
The Innovation Fund's Project of Oscilloscope High-speed Data Acquisition Channel, UESTC.	Mar 2013
The Third Prize in "UESTC CUP" Mobile Application Design Contest	Mar 2013
First-Class People's Scholarship (Top 6%) UESTC	2012 - 2013
The Second Prize in "Ecovacs" Intelligent Robot Design Contest, UESTC	Oct 2012
Samsung Enterprise Scholarship (Top 3%) UESTC	2011 - 2012
National Inspirational Scholarship (Top 3%) UESTC	2010 - 2011

PUBLICATIONS

- 1. **Zhanming Jie**, Jierui Li, and Wei Lu. "Learning to Reason Deductively: Math Word Problem Solving as Complex Relation Extraction." *In Proceedings of ACL*. 2022.
- 2. Yuxiang Zhou, Lejian Liao, Yang Gao, **Zhanming Jie** and Wei Lu. "To be Closer: Learning to Link up Aspect with Opinions." *In Proceedings of EMNLP*. 2021.
- 3. Lu Xu, **Zhanming Jie**, Wei Lu and Lidong Bing. "Better Feature Integration for Named Entity Recognition." *In Proceedings of NAACL*. 2021.
- 4. Xuefeng Yang, Benhong Wu, **Zhanming Jie**, Yunfeng Liu. "Overview of the NLPCC 2020 Shared Task: AutoIE." *In Proceedings of NLPCC*. 2020.
- 5. Liying Cheng, Yan Zhang, Dekun Wu, **Zhanming Jie**, Lidong Bing, Wei Lu, Luo Si. "Knowledge Graph Empowered Entity Description Generation." *In Proceedings EMNLP*. 2020.
- 6. **Zhanming Jie**, and Wei Lu. "Dependency-Guided LSTM-CRF for Named Entity Recognition." *In Proceedings of EMNLP*. 2019.
- 7. **Zhanming Jie**, Pengjun Xie, Wei Lu, Ruixue Ding and Linlin Li. "Better Modeling of Incomplete Annotations for Named Entity Recognition." *In Proceedings of NAACL*. 2019.
- 8. Zhanming Jie, and Wei Lu. "Dependency-based Hybrid Tree for Semantic Parsing." In Proceedings of EMNLP. 2018.
- 9. Chu Guo, **Zhanming Jie**, Wei Lu and Dario Poletti. "Matrix Product Operators for Sequence to Sequence Learning." *In Physical Review E.* 2018.
- 10. **Zhanming Jie**, Aldrian Obaja Muis, and Wei Lu. "Efficient Dependency-Guided Named Entity Recognition." *In Proceedings of AAAI*. 2017.
- 11. Ming Cheung, James She and **Zhanming Jie**. "Connection Discovery using Big Data of User Shared Images in Social Media." *IEEE Transactions on Multimedia*, 17(9), 1417-1428. 2015.
- 12. **Zhanming Jie**, Ming Cheung and James She. "A Cloud-assisted Framework for Bag-of-Feature Tagging in Social Networks." *In Proceedings of IEEE NCCA*. 2015.
- 13. Alvin Junus, Ming Cheung, James She, **Zhanming Jie**. "Community-Aware Prediction of Virality Timing Using Big Data of Social Cascades" In Proceedings of IEEE BigDataService. 2015.
- 14. **Zhanming Jie**, and Wei Lu. "Multilingual Semantic Parsing: Parsing Multiple Languages into Semantic Representations." *In Proceedings of COLING*. 2014.

MENTORING (4 PAPERS ACCEPTED)

Trung Loung, National University of Singapore	June 2021 - Present
Zichu Fei, Fudan University	June 2021 - Present
Jierui Li, University of Electronic Science and Technology and China	Nov 2020 - Jan 2021
Lu Xu, Singapore University of Technology and Design	2020 - 2021
Liying Cheng, Singapore University of Technology and Design	2020 - 2021
Yuxian Zhou, Beijing Institute of Technology	2020 - 2021
Huiming Wang, Zhejiang University	2018 - 2019