2019

Zijing Shi

Australian Artificial Intelligence Institute (AAII)

School of Computer Science Phone: +61 493412836

University of Technology Sydney Email: zijing.shi@student.uts.edu.au 15 Broadway Ultimo NSW 2007 Australia Home: https://winni18.github.io/

Research interests Natural language processing (NLP), reinforcement learning (RL)

Education **University of Technology Sydney** Sydney, Australia

> Mar. 2022 - Present Ph.D. in Computer Science

Mentors: Prof. Ling Chen, Dr. Zuo Hua.

Shanghai University Shanghai, China

M.Sc. in Management Science and Engineering Sept. 2018 - June 2021

Mentor: Prof. Nan Jing.

Shanghai Maritime University Shanghai, China

Sept. 2014 - June 2018 B.Sc. in Management Science and Engineering

Honors and Outstanding Graduate Award (Master) 2021

scholarships China National Scholarship for Postgraduate Studies 2020

> First Prize Postgraduate Scholarship of Shanghai University 2020

> National Second Prize in the 17th China Postgraduate Mathematical Contest 2020 in Modeling

> Second Prize in the Quantitative Investment Strategy Competition 2020

> Second Prize Postgraduate Scholarship of Shanghai University 2019

> National Third Prize in the 16th China Postgraduate Mathematical Contest in

Modeling First Prize Postgraduate Scholarship of Shanghai University 2018

Outstanding Graduate Award (Bachelor) 2018

Excellent Graduation Thesis Award (Bachelor) 2018

First Prize Undergraduate Scholarship of Shanghai Maritime University 2017

Publications CHBias: Bias Evaluation and Mitigation of Chinese Conversational (Conference) Language Models

> Jiaxu Zhao, Meng Fang, **Zijing Shi**, Yitong Li, Ling Chen, Mykola Pechenizkiy. The 61st Annual Meeting of the Association for Computational Linguistics (ACL), 2023.

Stay Moral and Explore: Learn to Behave Morally in Text-based Games

Zijing Shi*, Meng Fang*, Yunqiu Xu, Ling Chen, Yali Du.

The 11th International Conference on Learning Representations (ICLR), 2023. https://openreview.net/forum?id=CtS2Rs_aYk

Self-imitation Learning for Action Generation in Text-based Games

Zijing Shi, Yunqiu Xu, Meng Fang, Ling Chen.

The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL), 2023.

https://aclanthology.org/2023.eacl-main.50/

Human-Guided Moral Decision Making in Text-based Games

Zijing Shi, Meng Fang, Ling Chen, Yali Du.

The 37th Conference on Neural Information Processing Systems (NeurIPS), 2023. (Under review)

More than Minorities and Majorities: Understanding Multilateral Bias in Language Generation

Jiaxu Zhao, Yitong Li, **Zijing Shi**, Yulong Pei, Ling Chen, Mykola Pechenizkiy, Meng Fang.

The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD), 2023. (Under review)

Publications (Journal)

Cross-sectional Analysis and Data-driven Forecasting of Confirmed COVID-19 Cases

Nan Jing, Zijing Shi, Yi Hu, Ji Yuan

Applied Intelligence, 2022.

https://doi.org/10.1007/s10489-021-02616-8

Forecasting High-frequency Price of Shanghai Copper Futures based on Attention Mechanism and CNN-LSTM (In Chinese)

Nan Jing, Zijing Shi, Yumin Shu

Chinese Journal of Management Science, 2020.

https://doi.org/10.16381/j.cnki.issn1003-207x.2020.0342

Industry experience

Peng Cheng Laboratory (PCL)

Shenzhen, China

Intern at the Department of Intelligent Computing Sept. 2021 – Mar. 2022 I innovatively optimized investment portfolios using deep reinforcement learning and conducted in-depth analysis of multiple factors driving the cryptocurrency market.

Veighna Technology Co.

Shanghai, China

Quantitative developer intern

Jan. 2021 - May. 2021

I helped operate and upgrade Veighna, an open-source quantitative trading system framework with 20,000+ stars on GitHub.

Research experience

Optimizing Vehicle Scheduling for Electric Logistics Distribution

Mentor: Prof. Lifeng Mu (Shanghai University)

Dec. 2018 – Apr. 2019

I analyzed factors affecting the transportation efficiency of electric vehicles and developed an enhanced algorithm to optimize their routes.

Summary of findings available here.

Optimizing Marketing Strategies for Transportation Hubs using Artificial Intelligence

Mentor: Prof. Nan Jing (Shanghai University) Apr. 2018 – Mar. 2019 I optimized the recommendation algorithm for targeted advertising by analyzing consumer attributes and behaviors from text data.

This research was awarded as a Shanghai Soft Science Research Project.

Talks

Self-imitation Learning for Action Generation in Text-based Games

May 2023

The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL)

Skills

Programming

Proficient in Python, SQL, MATLAB, TensorFlow, and PyTorch. Familiar with Go and Java.

Languages

Fluent in English (IELTS 7.0) and Mandarin (mother tongue)

Other interests

I enjoy photography and cooking in my free time.