# Yu-Zhe Shi

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### **Degrees**

B.Eng. *magna cum laude*, C.S., Huazhong University of Science and Technology. *2022*, Wuhan, P. R. China. ACM Elite Program in Computer Science and Engineering, advisor: Drs. Hai Jin and Kun He. Dissertation: Modeling the Prior of Goals and Constraints for Human Problem-Solving, advisor: Dr. Yixin Zhu.

### Career

Beijing Institute for General AI. 2022 – 2023, Beijing, P. R. China.

Research Staff, Computation and Commonsense Lab, with Dr. Song-Chun Zhu.

Institute for AI, Peking University. 2022 – 2023, Beijing, P. R. China.

Research Associate, Yixin Zhu Lab, with Dr. Yixin Zhu.

Beijing Institute for General AI. 2021 – 2022, Beijing, P. R. China.

Undergraduate Research Assistant, Computation and Commonsense Lab, with Dr. Song-Chun Zhu.

Center for Vision, Cognition, Learning, and Autonomy, UCLA. 2021, Los Angeles, CA. Undergraduate Research Assistant, Computational Modeling, with Dr. Yixin Zhu.

Department of Computing, Imperial College London. 2020, London, UK.

Undergraduate Research Assistant, Inductive Logic Programming Group, with Dr. Wang-Zhou Dai.

#### **Selected Honors**

Outstanding Graduation Dissertation. 2022, Ministry of Education, P. R. China.

For the contribution on computational modeling, in 1 % of all thesis-based senior undergrads nationwide.

Outstanding Undergraduate Researcher. 2021, Ministry of Education, P. R. China.

For distinctive progress in investigating abduction, in 5 % of all candidates.

National Scholarship. 2019, Ministry of Education, P. R. China.

For outstanding academic performances, in 0.2 % of all undergrads nationwide.

#### **Services**

Co-founder, Learners' Engieering and Research Network (LEARN Lab). *2019 – Present*, P. R. China. LEARN is a platform for integrating resources for undergraduate research and engineering.

Microsoft Learn Student Ambassador. 2019 – Present, Microsoft Research Asia, Beijing, P. R. China. Co-organizing technical events with Microsoft Student Club.

### **Selected Invited Talks**

Research Seminar. 2021, Beijing Institute for General AI, Beijing, P. R. China.

A Rough Introduction to Abduction: Formulation, Cognitive Basis, and Potential Research Directions.

Machine Learning Seminar. 2020, Imperial College London, London, UK.

Seminar: A Technical Tutorial on Program Synthesis.

Microsoft Learn Student Ambassadors Association. 2020, Microsoft Research Asia, Beijing, P. R. China. What is Abduction? A Comprehensive Review in Cognitive Sciences and AI.

#### **Grants**

National Undergraduate Innovation Grants. 2020 – 2022, Ministry of Education, P. R. China. *Abduction-based Open-World Learning with Predicate Invention (No. 10487232)*, \$3,138, Student PI.

# **Collaborators**

- Dr. Wang-Zhou Dai, Research Associate, Imperial College London, Since 2020.
- Dr. Yixin Zhu, Assistant Professor, Peking University, Since 2021.
- Dr. Song-Chun Zhu, Chair, Beijing Institute for General AI; Professor, Peking University, Since 2021.
- Dr. Josh Tenenbaum, Professor, MIT, Since 2021.
- Dr. Ying Nian Wu, Professor, UCLA, Since 2022.
- Dr. Kun He, Professor, Huazhong University of Science and Technology, Since 2022.
- Dr. John Hopcroft, Professor, Cornell University, Since 2022.