

#### Education

## Tsinghua University, Beijing, China

Sept. 2021 - Present

Feb. 2024 - July 2024

GPA: 3.93/4.00

Undergraduate at Special Pilot Class in Computer Science (Yao class)

- Major: Computer Science and Technology
- Minor: Chinese Language and Literature

#### University of Washington, Seattle, USA

Research Visitor at Paul G. Allen School of Computer Science

# Publications & Manuscripts

(\* indicates equal contribution.)

- [5] (ICLR 2025) Ruizhe Shi\*, Runlong Zhou\*, Simon S. Du. "The Crucial Role of Samplers in Online Direct Preference Optimization".[link]
- [4] (NeurIPS 2024) Ruizhe Shi, Yifang Chen, Yushi Hu, Alisa Liu, Hannaneh Hajishirzi, Noah A. Smith, Simon S. Du. "Decoding-Time Language Model Alignment with Multiple Objectives". [link]
- [3] (ICML 2024) Chenhao Lu, Ruizhe Shi\*, Yuyao Liu\*, Kaizhe Hu, Simon S. Du, Huazhe Xu. "Rethinking Transformers in Solving POMDPs".[link]
- [2] (ICLR 2024) Ruizhe Shi\*, Yuyao Liu\*, Yanjie Ze, Simon S. Du, Huazhe Xu. "Unleashing the Power of Pre-trained Language Models for Offline Reinforcement Learning".[link]
- [1] (NeurIPS 2023) Yanjie Ze, Yuyao Liu\*, Ruizhe Shi\*, Jiaxin Qin, Zhecheng Yuan, Jiashun Wang, Huazhe Xu. "H-InDex: Visual Reinforcement Learning with Hand-Informed Representations for Dexterous Manipulation". link

## Research Experiences

# Princeton University (Remote)

Mentored by Dr. Yue Wu

Dec. 2024 - Present alignment theory

#### University of Washington (Seattle, USA)

Supervised by Prof. Simon S. Du

Dec. 2023 - Sept. 2024

alignment theory

## Tsinghua University (Beijing, China)

Supervised by Prof. Huazhe Xu

Mar. 2023 - Jan. 2024 decision-making & transformer

## Awards & Honors

#### First-level Comprehensive Scholarship

Tsinghua University

Nov. 2024

Sept. 2024

top scholarship

## Yao Award (Silver Medal)

IIIS, Tsinghua University

top scholarship [link]; 3 students institute-wide

#### Jiang Nanxiang Scholarship

Tsinghua University

Nov. 2023 top scholarship; 1 student institute-wide

## China National Endeavor Scholarship

Beijing Education Bureau

Oct. 2022

## First Prize in National High School's Mathematics Competition, Jiangsu Region

Chinese Mathematical Society

1 student institute-wide Oct. 2020

top 20 province-wide

#### Service

#### Conference Reviewer

NeurIPS 2024 (Top Reviewer [link]), ICLR 2025, AISTATS 2025

#### Yao Class Seminar Co-organizer

Co-organize weekly research seminars [link]

Tsinghua University

Fall 2024 - Spring 2025

## Teaching Assistant

Fall 2024

Natural Language Processing

Tsinghua University

### Voluntary Drop-in Tutoring

Tutor freshmen in basic courses

I have 157 hours of officially recorded volunteering work.

Oct. 2022 – July 2024

Tsinghua University

## **Core Courses**

Mathematics & Theory: Calculus, Linear Algebra, Abstract Algebra, Introduction to Complex Analysis, Probability and Statistics, Basic Topology, Introduction to Optimization Theory, Algorithm Design, Physics of Information, Theory of Computation, Game Theory, Economics and Computation;

Coding & AI: Introduction to Programming, Type-safe Modern System Practice, Introduction to Artificial Intelligence, Mathematics for Artificial Intelligence, Machine Learning, Deep Learning, Artificial Intelligence Principles, Computer Vision, Natural Language Processing, AI+X Computing Acceleration;

Linguistics & Literature: Introduction to Linguistics (ongoing), Literary Theory (ongoing), Literature and Cultural Theory, Literary Masterpieces and Writing Training, Chinese Modern Poetry.

## **Technical Skills**

Programming Skills: Python, C/C++, LATEX, Scala, Matlab.

Language Skills: Chinese Mandarin (native), English (TOEFL 104 [R30/L26/S23/W25], GRE 327+3.5 [V157/Q170]).