

ARIANA (HAOYUE) TANG

Senior Undergraduate @ *Shanghai University of Finance and Economics*
Visiting Student Researcher @ Stanford | hosted by Prof. Modibo Camara

✉ [school] aritang@stanford.edu ✉ [personal] ariana_tang@outlook.com ☎ +86-13538828725
✉ No. 777 Guoding Rd., Shanghai, China 🌐 about me and my blog: <https://aritang.github.io/posts/pinned/>



EDUCATION

Bachelor of Engineering

Shanghai University of Finance and Economics (SUFE)

📅 Sept. 2021 - Ongoing 📍 Shanghai, China

- **Major:** Pilot Class of Interdisciplinary Science¹
- **GPA:** 3.9/4.0, Top of Major (1/111).

Summer Session

Stanford University

📅 Jun. 2023 - Aug. 2023 📍 Palo Alto, California

- **Highlight:** Apart from 8-credits courses, I also participated in market design discussions with Prof. Al Roth and attended SITE sessions on theoretical and experimental economics.
- **GPA:** 4.075/4.3, 8 credits.

RESEARCH

AI for Social Good

Collaborating with Prof. Ryan Shi

📅 Jan. 2024 - Ongoing

- Inspired by a Chinese volunteer matching platform, we address equity and efficiency concerns by mitigating the bias towards popular opportunities.
- Utilizing an online model of Restless Multi-Armed Bandits.

A case study of the Amazon Buy Box

Collaboration with Prof. Hu Fu

📅 Sept. 2023 - Oct. 2024 | Paper is *on the way*...

- We study a monopolistic competition with search friction. We show that by introducing a prominent position, together with appropriate mechanisms for seller placements, helps stabilize prices. We also consider implications on welfare and surplus.
- The setting is motivated by Amazon's BuyBox and the reported price volatility thereof.

Deep Reinforcement Learning for Inventory Management

Hosted by Prof. Chaolin Yang @ SUFE

📅 Jan. 2023 - Dec. 2023

- Led a SUFE research team advised by Prof. Chaolin Yang, culminating in 'Xu et al., [Multi-Agent Deep Reinforcement Learning for Decentralized Proactive Transshipment](#)' (2023).

¹The Pilot Class of Interdisciplinary Science of SUFE is a selective undergraduate program designed for students aiming for academic careers. It emphasizes an interdisciplinary curriculum that integrates the mathematical foundations of operations research, computer science and economics.

STRENGTHS & SKILLS

communicator listener wine

multi-armed bandits online algorithm

solver linux Python

SELECTED COURSEWORK

SUFE

- Mathematical Analysis, co-taught by Prof. Zhihao Tang, Prof. Tsz Chiu Kwok, and Prof. Nick Gravin
- Algorithm Design and Analysis, Prof. Bun-dit Laekhanukit
- Discrete Mathematics, Prof. Nick Gravin
- Operations Research (Advanced), Prof. Bo Jiang

Stanford

- The Fourier Transform and Its Applications, Maryann Benny Fernandes
- Introduction to High Performance Computing, Prof. Steve Jones
- Public Speaking: Romancing the Room, Prof. Bruce Bean; Prof. James Wagstaffe

REFEREES

(Listed in the order of our first encounter)

Pinyan Lu

✉ My Advisor. Professor, Director of ITCS@SUFE
✉ lu.pinyan@mail.sufe.edu.cn

Hu Fu

✉ Associate Professor, ITCS@SUFE
✉ fu.hu.thu@gmail.com

Modibo K. Camara

✉ Assistant Professor of Economics, Stanford Graduate School of Business
✉ mcamara@stanford.edu

Ryan Shi

✉ Assistant Professor, Department of Computer Science at the University of Pittsburgh
✉ ryanshi@pitt.edu