

Qijia He

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EDUCATION

Southern University of Science and Technology (SUSTech)

B.Sc. in Data Science and Big Data Technology, GPA: 3.88/4.0, Major GPA: 3.95/4.0 Aug. 2021 - Jun. 2025 (Expected)

- Awards: 2nd Class Scholarship of Zhicheng College (Top 10%, 2022 & 2023), Elite Student in Dept. of STAT & DS
- <u>Relevant Courses</u>: Computer Vision, Data Structures & Algorithm Analysis, Data Science Practice, Big Data Analysis Software & Application, Computer Programming, Multivariate Statistical Analysis, Mathematical Analysis

Stony Brook University

Exchange Student, GPA: 4.0/4.0

• Relevant Courses: Data Analysis, Data Mining, Foundations of Machine Learning, Introduction to Visualization

PROJECTS & INTERNSHIP

Exploiting Offline Dataset to Improve Online Bandit Learning Efficiency with Relative FeedbackShenzhen, ChinaPI: Prof. Fang Kong, SUSTechSept. 2024 - Present

- Conducted a comprehensive literature review on the state-of-the-art bandit algorithms, focusing on estimating model parameters using offline stochastic data for online preference feedback by accommodating the LinUCB algorithm.
- Proposed several algorithmic approaches and conducted regret analysis, mathematically demonstrating that the offline dataset can effectively reduce regret within the proposed algorithm framework.
- Delivered a seminar presentation on stochastic linear bandits based on *Bandit Algorithms* [Tor Latimore et al, chapter 19].

TAPALL

Student Intern

Shenzhen, China Jun. 2024 - Aug. 2024

- Scraped 20,000+ uncopyrighted videos from several websites (Pikwizard, Vecteezy, Mazwai, etc.) through Beautiful Soup using Python; designed a video filtering algorithm to select the videos with flat surface, camera in motion from the dataset for product demonstration in various environments, and classify them into several predetermined categories.
- Enabled the migration of two key business operations (3D Modeling and Digital Human) to the cloud by configuring a robust Python environment, replacing legacy on-premises systems.
- Developed a cloud scheduling system to implement the company's 3D Modelling and Digital Human solutions, reduced back-end operational expenses by implementing elastic GPU deployment instead of engaging in long-term leasing.

Nature Index Periodicals: A Comparative Analysis of Impact and Innovation in PublicationsShenzhen, ChinaPI: Prof. Yifang Ma, SUSTechJun. 2022 - Aug. 2023

- Collected 21,848 journal information from over 10 million papers from the Web of Science and a private database, featuring paper indexes like conventionality, hit5, hotspot, and novelty.
- Visualized KDE plots for over 1.5 million papers in NI and non-NI journals with similar journal impact factors in the same field, finding that NI journals do not exhibit an advantage in novelty.
- Analyzed the affiliations and publications in NI and non-NI journals, concluding that NI journals tend to favor works from institutions in the U.S. and Europe. Suggesting either a limitation in the Nature Index's ability to differentiate highly influential journals or an inherent bias in the selection practices of publishers.

More Academic Projects and Competitions

SKILLS & MISCELLLANEOUS

Programming: Python, R, Java, C/C++, HTML/CSS/JavaScript, Hadoop & Spark

Language: Mandarin (native), English (proficient), Spanish (Basic)

Social Work:

- Assistant Instructor for SUSTech Youth Rock Climbing Course
- Student Assistant in Student Affairs Center, SUSTech
- Contributed Over 80 Hours of Volunteer Service Across Diverse Activities and Organizations

Interest: Rock Climbing (SUSTech's Rock Climbing Team), Badminton (Zhicheng College's Badminton Team), Hiking.

Jan. 2024 Jun. 2022 - Aug. 2022

Stony Brook, NY, USA

Shenzhen, China

Aug. 2023 - Dec. 2023