JIAYI WU

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Homepage: https://jiayiw005.github.io/ Google Scholar & Github & LinkedIn

EDUCATION

Brown University

Sept 2024 - May 2028 (expected)

B.Sc. Mathematics-Computer Science, Urban Studies

GPA: 4.0/4.0

Related courses: Critical Data and Machine Learning Studies, Linear Algebra with Theory, Program Design with Data Structures and Algorithms, Honors Statistical Inference I, Abstract Algebra, Urban Life in the Global South

Shanghai Qibao Dwight High School

Sept 2021 - June 2024

International Baccalaureate Diploma Programme (IBDP)

GPA: 4.0/4.0

Related courses: Mathematics Analysis and Approaches HL, Computer Science HL, History HL, Theory of Knowledge, Global Politics-History Extended Essay

RESEARCH INTERESTS

- 1. Symbolic systems, multi-agent systems for language agents
- 2. Complex systems and sociotechnical infrastructure/governance (for urban landscapes and work-place algorithmic management in particular)
- 3. Accessibility, distributivity, and participation under contexts of fairness, transparency, interpretability, and auditing

ACADEMIC EXPERIENCE

Atypical Combination in Computational Sciences

Feb 2025 - Present

Supervisors: Prof. Huilian Sophie Qiu

Northwestern University

Affiliation: Northwestern Institute on Complex Systems (NICO), Uzzi Lab

Collective Data Stewardship and Governance

Feb 2025 - Present

Supervisors: Prof. Vera Khovanskaya

University of Toronto

Affiliation: Faculty of Information

AI Fairness Research, Sociall Responsible Computing Handbook

Dec 2024 - Present

Supervisors: Prof. Suresh Venkatasubramanian and Prof. Julia Netter

Brown University

Affiliation: Brown CS, Center for Technological Responsibility (CNTR)

Critical Auditing of Food-Delivery Algorithmic Management [1]

Nov 2024 - Present

Supervisors: Prof. Harini Suresh

Brown University

Affiliation: Brown CS, the Data in Society Collective (DISCO Lab)

Digital Ethnography of Lower-Class Chinese Women [2]

Feb 2023 - July 2023

Supervisors: Prof. Kevin Marinelli

The University of North Carolina at Chapel Hill

Affiliation: Program for Public Discourse, Pioneer Academics

PROFESSIONAL EXPERIENCE

Data Engineer InternshipJan 2025 - PresentSupervisors: Delaney Dill, Nelson NgouenetGLBL Foundation

Affiliation: P1.UVWP The Water Purifier

Data Science Internship July 2024 - Sept 2024

Supervisors: Angelos Chronis Infrared City

PROJECT EXPERIENCE

ConnectRI Broadband Navigator Accessibility Audit Feb 2025 - Present

Affiliation: Digital Equity Initiative Brown Initiative for Policy

AsyLex Refugee Claim Entity Extraction & Judgement Prediction Sept 2024 - Mar 2025

Affiliation: Ignite Fellowship AI4ALL

Urban-Political Data Visualizers [3] Sept 2024 - Present

Affiliation: Data Board Brown Political Review

Open-Sourced Android Mobile App for Education Resource Sharing Nov 2021 - Present

Affiliation: Founder, Technology Board Converter Education Initiative

Adversarial Connect4 AI Solver with Minimax and Pruning

Nov 2024 - Dec 2024

Affiliation: CSCI 0170 Brown University

Modeling Honeybee Population Dynamics Feb 2022 - Feb 2023

Affiliation: Team 12736 High School Mathematical Contest in Modeling (HiMCM)

PUBLICATIONS

- [1] **Jiayi Wu** and H. Suresh, "Toward labor-inclusive food delivery algorithmic management: Cross-platforms case studies, computational approaches, and regulatory alternatives," Submitting to the 28th ACM Conference on Computer-Supported Cooperative Work Social Computing (CSCW).
- [2] **Jiayi Wu**, "Shout through the air: A digital ethnography on the rhetoric of china's lower-class "toilet girl" as empowerment and subversion," in *Pioneer Journal*, 2023.
- [3] **Jiayi Wu**, "Urban pivots, political margins: The scramble for urban village in the early 2000s' southern china," *Brown Political Review*, 2025.

ACHIEVEMENTS

Chairman Scholarship (5%), Shanghai Qibao Dwight High School

Academic Excellence Scholarship First Place (1%), Shanghai Qibao Dwight High School

Meritourious Award (15%), COMAP's High School Mathematical Contest in Modeling

Global First Place Award (5%), China Thinks Big Competition(CTB)

Spring 2023

Spring 2023

Spring 2023

Spring 2023

SKILLS/MISCELLANEOUS

Programming Languages Java, Python, JavaScript, HTML/CSS, SQL/MySQL, MATLAB,

XML, ReasonML, Racket, C/C++, Processing

Programming Tools PyTorch, Tensorflow, Sklearn, Pandas, Numpy, Vite, Vue.js, D3.js,

Plotly, Android Studio, Microsoft Excel, Git/GitHub, Linux

Miscellaneous Zine/Collage-Making, Reading (Historical/Science Fiction)