

JIAWEI XU

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EDUCATION

New York University

09/2021 - 05/2025

Bachelor of Science, Honors Math and Computer Science

GPA: 3.86

Relevant Courses: Probability, Statistics, Numerical Analysis, Optimization, ODEs, Data Structure, Algorithms

EXPERIENCE

Deep Learning Algorithm Intern, Moore Threads Technology Co.Ltd.

06/2023- Present

- Reproduced and fine-tuned the CNN and Transformer models (Yolo, Detr, etc.) with PyTorch, achieving over 95% accuracy on object detection transfer applications.
- Exported 30 models from NPU model zoo to pipelines inferred under ONNX runtime, enhancing scalability and improving compatibility for seamless deployment across platforms.
- Drove the design of innovative AI ISP algorithms, creating an in-house denoising model structure optimized for low-light conditions with Conditional GANs. Committed to in-depth research on state-of-the-art AI denoising algorithms, reproducing and analyzing the test effects.

Software Develop Engineer Intern, Vuetech Health Innovations

12/2022- 02/2023

- Researched cutting-edge data visualization techniques of the software EVA(Emergency Video Alerts), resulting in a 30% reduction in user confusion and a 40% increase in data comprehension among clients.
- Tested the software EVA in monitoring human falls for bugs and other issues that affected user experience.
- Facilitated weekly team meetings to report updates and assign tasks.

Independent Researcher, CIS Research

06/2021- 09/2021

- Cooperated with faculty in Courant Institute to build pricing models of part of Shanghai real estate market.
- Collected and analyzed 8 macroeconomic indicators and 6 microeconomic variables in Shanghai from 2005 to 2015, providing critical insights for economic forecasting and informed decision-making at city level.
- Spearheaded quantitative analysis of obtained pricing data, leveraging time series models and multiple linear regression in Excel and STATA; derived a final equation with influential factors, documenting the research progression in a comprehensive paper.

PROJECTS

NYUSH Dining Web, NYU SH

02/2023- 05/2023

- Streamlined the development process of the interactive food service web platform by leading a cross-functional team, supporting functionalities 20% more than the mainstream catering software
- Constructed the backend framework and the modules of login system and used Flask&SocketIO to compile a real-time network chat room.
- Pioneered the design of a recommendation strategy for restaurant recommendations, integrating Pearson, Jaccard, and Cosine algorithms; achieved a 25% increase in search relevancy and a 50% improvement in user satisfaction.

Mars Robot Group Leader, NYU Tandon

01/2022- 06/2022

- Delegated daily tasks and milestones to team members and designed strategies to reach goals.
- Utilized Fusion 360 to design and simulate the robot's movements, enabling accurate assessment of its capabilities and identification of potential improvements.
- Leveraged Arduino programming to control robot movements to accurately advance, climb, turn, and execute other commands of the designated map route with precision and efficiency. Finally won the game 30% faster than the second place.

SKILLS

Python, GAMS, Julia, Stata, PyTorch