

# Peiyang Wu

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## Education

**Master of Computer Science**, University of Illinois Urbana-Champaign, CS | Illinois, USA 2024-present  
3.92/4.0 **Study Away (Computer Science & Data Science concentrating in Marketing)**, NYU, CAS | NY, USA 2022-23  
3.765/4.0 **BTech in Computer Science & Data Science concentrating in Marketing**, New York University Shanghai 2020-24

**Achievements:** Latin Honors: Cum laude | Deans's List

**Courses:** Applied Internet Tech | Operating Systems | Software Engineering | ML | Algorithm | Theory of Computation | Discrete Math

**Certifications:** Dean's Undergraduate Research Fund (Summer 2023) | Honorable Mentions in COMAP's Mathematical Contest in Modeling (MCM) (Spring 2023) | Best Innovation Award in NYU Hackathon, Math Modeling Track (Spring 2022)

## Technical Skills

**Programming** Python, Node.js, JavaScript, Java, HTML, CSS, C  
**Frameworks/Tools** Git, Flask, Express.js, React.js, Vue.js, Bootstrap  
**Software** Linux, Tensorflow, Pytorch, Docker, Conda, Keras, Transformer, IBM SPSS, Stata, R, CUDA, Matlab, Git, Scripting (Bash)

## Experience

**New York University, Full Stack Programmer & Research Assistant** July 2024 - present

- **Full stack** build up the platform using node.js, studies how AI facilitates financial literacy and in turn affects retail investors' trading behaviors
- Collaborate with teammates to Collect and analyze experimental data, and Conduct literature review

**Chongqing International Media Center, Full Stack Programmer & IT Support Intern** July 2023 - Sep 2023

- **Full stack** designed, developed, and deployed a user-centric website featuring AI-driven tools, enabling interactions with **3** robust Large Language Models, along with AI painting in **18** diverse artistic styles
- Initiated proactive outreach to forge connections with tech industry leaders willing to integrate AI functionalities into their operations, facilitating the integration of their API functions into the website's framework
- Provided technical support to a user base of over **3,000** individuals, delivering concise user preferences to enhance overall user experience and usability

**Chongqing Chengyu Media, User Experience Design | Backend Manage Intern** July 2022 - August 2022

- Utilized back-end logging to track user feedback; informing continuous improvements to the platform
- Collaborated in weekly meetings to disseminate progress reports and establish priorities for the upcoming week
- Managed Software Back-end for Chongqing Chengyu Media, responsible for ensuring timely news creation and publication

**Chongqing Publishing Group, Web Development | IT Support Intern** July 2021 - August 2021

- Developed chat boxes and customer service interaction features involving web visual design, client-side programming, compatibility improvements, and functional testing
- Improved and implemented company's official website, focusing on client-side design and programming, completing the majority of main page design and coding
- Provide general IT support for development team and other department facilities to **500** faculty

## Projects Highlights

**Big Data Analyst Project** Sep 2022 - present

New York University & Ant-Group (Research Assistant)

- Conduct data analysis with highly confidential data given by Alibaba. Cleanse and process data to build a conclusive model. Review literature and deliver regular summary reports and visualizations to team members

**Dialog State Tracking with Large Language Models (LLMs)** Sep 2023 - Dec 2023

Natural Language Processing (Capstone Group Project)

- Employed advanced techniques to fine-tune LLMs using Transformer architecture, optimizing their capabilities for Dialog State Tracking tasks. Obtained a temporary State of the Art Result in Multiwoz 2.1 Dataset
- Conducted rigorous research to identify optimal hyper-parameters for training across various LLMs, including Llama2-chat, Llama2 (7B, 40B), and Falcon (7B)
- Monitored the training process on HPC systems, maintaining timely records of logs, and swiftly resolving any encountered bugs

**Predicting Stock Price Trends by Generating Candlestick Charts** Sep 2023 - Dec 2023

Variational AutoEncoder (VAE) and Transformer Utilization (Capstone Group Project)

- Utilized **Transformer-based** and **Variational AutoEncoder** models to predict future stock price movements with precision
- Executed a rigorous training program on an HPC platform, fine-tuning hyperparameters to achieve superior prediction accuracy

**AeroGuild Airline Ticket-Reservation Website** Fall 2022

Databases System, full-stack web design project with Python (Course Project)

- Develop and deploy a **full-stack** website, providing customers with access to search and book airline tickets while enabling airline agent companies to add their services
- Implement server-end by **Python Flask**, a responsive front-end built on **Bootstrap**, and a **MySQL** database, ensuring a feature-rich and user-friendly platform