

# (LINDA) CHUYI ZHAO

## EDUCATION

**Tufts University**  
*M.S. in Computer Science*

Medford, MA  
*Sep. 2022 – May 2024 (expected)*

**ShanghaiTech University**  
*B.E. in Computer Science*

Shanghai, China  
*Sep. 2018 – Jul 2022*

## TECHNICAL SKILLS

**Programming Languages:** Python, C/C++, Java, HTML/CSS, JavaScript, SQL(PostgreSQL), MongoDB

**Frameworks & Technologies:** Vue.js, React.js, Node.js, PyTorch,  $\text{\LaTeX}$

**Developer Tools:** Git, Linux, VS Code, Visual Studio, IntelliJ Idea, Docker

## EXPERIENCE

### Software Developer Intern

Shanghai, China

*Shanghai Neogenint Intelligent Technology Co., Ltd | Javascript, Python, Java,*

*Jul. 2021 – Oct 2021*

- Involved in embedded software development and program testing with focus on machine learning.
- Developed robotic programs including real-time crack detectors and *JetBot*, used as foundation for future projects.
- Generated server performance testing reports using *MLPerf Benchmarks* to enhance the server design workflow.

### Undergraduate Research Assistant

Shanghai, China

*ShanghaiTech University | Javascript, Python, MongoDB*

*Jul 2021 – Sep 2022*

- Contributed as a key member in three visual analytics projects, with one accepted by an IEEE conference and another under review. Emphasized on full-stack development and utilizing AI predictive models for data analysis.
- Created web applications with a focus on interactive visualizations utilizing Vue.js, D3.js and PyTorch.
- Designed visualizations using **Figma**, and created accompanying videos for paper supplement materials.

## SELECTED PROJECTS

### Commercial Analysis Scientific App: *PromotionLens* | *Vue.js, Python, MongoDB*

*Jul 2021 – Sep 2021*

- Developed a full-stack web application with **Vue.js** as the frontend and **MongoDB** for the backend.
- Used Python for data crawling and processing, Javascript for data visualization, and combined trained AI predictors with Flask to enable users to evaluate and develop promotional strategies.
- Collaborated with experts and stakeholders to complete studies and iterated the application designs as needed, resulting in **acceptance at by the IEEE VIS2022 conference.**

### Embedded App on Nvidia Jetson Nano: *JetBot* | *Vue.js, Java, Python, SQL, Docker*

*Jul 2021 – Sep 2021*

- Designed and implemented a web application on Jetson Nano using **Vue** for the frontend and **SpringBoot** framework with **SQL** for the backend. Equipped the small robot with a camera, engines, wheels and a monitor.
- Implemented features such as face recognition, voice prompt, and obstacle avoidance, enabling the JetBot to move and interact with people safely. The code was used a robotic project basis.

### Bioinformatics: PPI Prediction Based on Multi-Channel Deep Learning | *Python*

*Sep 2020 - Apr 2021*

- Developed a deep learning-based framework with **PyTorch** to evaluate *Protein Data Bank(PDB)* data for bioinformatics research and evaluated the model with state-of-the-art benchmarks.
- Preprocessed nearly 20,000 PDB datasets using Python and PBS scripts on high-performance computing servers.
- Trained a predictive model with an accuracy of 92.7% using Python, surpassing current PPI score standards.

### Operating System Projects: *Pintos* | *C*

*Sep 2020 – Nov 2020*

- Developed an operating system including thread, memory, and file system management implementation.
- Implemented concurrency using semaphore-based locks, scheduling threads with different priorities, and handling user program operations, system call, virtual memory, and page faults.

## SELECTED HACKATHON AWARDS

**TechTogether Boston 2023** | *UI Design, Software Development* | Winner of 3 prizes

*Oct. 2022*

**SC21 Student Cluster Competition** | *HPC* | Winner of the Reproducibility Challenge

*Nov. 2021*