LinkedIn: Chuyi(Linda) Zhao
https://lindazha0.github.io/

Email : chuyi.zhao@tufts.edu
Mobile : +1-781-866-7220

CHUYI ZHAO

Education

Tufts University — MA, USA
M.S. in Computer Science — *Sep. 2022 – May 2024(expected)*

ShanghaiTech University — Shanghai, China
B.E. in Computer Science — *Sep. 2018 – Jul 2022*

Professional Experience

Software Developer Intern — Shanghai, China
Shanghai Neogenint Intelligent Technology Co., Ltd — *June. 2021 – Sep 2021*

- Achieved server performance testing using *MLPerf Benchmarks* and finished reports.
- Developed and deployed programs on Nvidia Jetson Nano using Python, Java, and Javascript.
- Developed a real-time crack detector,and an AI Jetbot with full-stack, combining user-friendly GUI and AI modules. Robust code efficiently helped the company's project setup and served as a developing basis.

Research Experience

Undergraduate Research Assistant — Shanghai, China
ShanghaiTech University — *June 2021 – Sep 2022*

- Worked as a main member in three visual analytics research projects and produced two *IEEE* papers.
- Developed full-stack web applications using Vue.js, Python and MongoDB to process, visualize and analyze data.
- Completed visualization designs using *Figma*, and video editing using *Final Cut Pro*.

Selected Projects

Web App for E-commerce Analysis: *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.
- Crawled and processed data with Python, visualized the data interactively with Javascript and combined trained AI predictors with **Flask**, allowing users to evaluate and determine promotion strategies for e-commerce.
- Collaborated closely with experts and stakeholders to complete studies, get feedback and iterated the application, producing a *paper* ccepted by *IEEE VIS2022*.

Web App on Nvidia Jetson Nano: JetBot | *Vue.js, Java, Python, SQL,Docker* — *Jul 2021 – Sep 2021*

- Developed and deployed a full-stack web application on Jetson Nano with **Vue.js** for the frontend, and a **SpringBoot** framework and **SQL** for backend. Equipped the device with camera, engine, wheels and a monitor.
- Added functionalities such as face recognition, voice prompt, obstacle avoidance, etc., which made the JetBot a tiny robot capable of moving around, recognizing, greeting and interacting with people safely.

Bioinformatics: PPI Prediction Based on Multi-Channel Deep Learning | *Python* — *Sep 2020 - Apr 2021*

- Constructed a deep learning framework to score *PDBbind (Protein Data Bank)* data with **PyTorch** for research.
- Processed PDBbind datasets of nearly 20,000 with Python and PBS scripts on HPC servers.
- Trained a prediction model with the accuracy of 71% using Python, compensating current PPI score benchmarks.

Operating System Projects: *PintOS* | *C* — *Sep 2020 – Nov 2020*

- Developed a simple operating system framework with C, completing thread, memory and file system management, and system calls, which achieved thread synchronization, and common file operations.
- Implemented thread concurrency with multiple locks based on semaphore, allowing for atomic operations and threads with different priorities and scheduling to perform properly.
- Achieved user program operations by stacking and system calls, dealing with virtual memory and page faults.

Technical Skills

Programming Languages: Python, C/C++, JavaScript, HTML/CSS, SQL(PostgreSQL), Java
Frameworks & Technologies: Vue, HTML/CSS, Node.js, PyTorch, LaTeX
Developer Tools: Git, Linux, VS Code, Visual Studio, Intellij Idea, Docker