Jun Xiang (Terry) Shi

Email | Linkedin | Github

EDUCATION

University of Michigan, Ann Arbor — Ann Arbor, MI
B.S Computer Science, B.S Data Science — Aug 2021 - May 2025
GPA: 3.8/4.0
Relevant Coursework: Operating Systems, Machine Learning, Computer Organization, Database Systems, DSA

WORK EXPERIENCE

Ultima Insights - Automating investment research using AI — Remote
Software Engineering Intern — Sept 2023 - Present
- Engineered diverse web components for an investment research platform that interprets data from approximately 300,000 web searches. Utilized **Next.js**, **Typescript**, **Tailwind CSS**, and **React Query** for client-side data fetching from backend APIs.
- Introduced an automation feature delivering stock summaries upon user request directly to their emails; leveraged **Python** for data population and user analysis, guiding the enhancement of the user interface, leading to a ~230% growth in the user base

Trend Micro Inc. — Ottawa, ON
Software Engineering Intern — May 2023 - Aug 2023
- Developed an **AWS DynamoDB** database and the backend integrations of a **Github** application that performs source code vulnerability scans; utilized **AWS** cloud native, serverless services such as **Lambda**, **SQS**, **API Gateway,** and **EventBridge**
- Designed and implemented a scalable application that scans project planning documents to automatically create bulk issues of ~100 tickets on **Jira** through the **Atlassian API** using **Typescript & Node**; reduced weekly planning meeting times by ~300%
- Implemented the data processing functions for an Attack Surface Risk Management service that aggregates data from ~1,000 **AWS** entities using **Golang;** constructed flexible graphs using **D3.js** to visualize associations between different entities
- Wrote **Jenkins** pipeline tests with **Jest** resulting in >95% test coverage for a production application of ~100,000 users

Amway Inc. — Ann Arbor, MI
Software Engineering Intern — Jan 2023 - Apr 2023
- Developed a serverless application through **Cloudformation** that processes the requests of importing/processing/exporting images from the frontend; handled processed requests through **Lambda** functions, packaging data to export to **S3** buckets
- Designed an **AWS Aurora** database that stores ~8000 entries of metadata, including **S3 endpoints** for saving processed images; transferred data between the backend and the database using **API gateway,** developed using **Python**
- Collaborated on a facial image stitching algorithm that stitches 3 views of facial images into a single panorama using **Numpy**, **OpenCV**, and other **Python** frameworks; stitched images in an average of 10 seconds tested on a dataset of ~700 images
- Performed CIELAB and pigment detection by automasking facial features using **Python Facemesh** with >97% accuracy

Michigan Student Artificial Intelligence Lab — Ann Arbor, MI
Frontend Developer/Data Analyst — Sept 2022 - Present
- Developed a web application using **Wowchemy**; performed consistent updates on web pages of ~500 weekly visits
- Automated the generation of static web pages through **Hugo**; edited templated **HTML** pages using **markdown**
- Designed and taught a song recommendation project that generates a list of 100 songs based on the user's spotify profile; trained data by constructing a CNN using **Tensorflow** and the **Spotify API**; cleansed data through **Scikit learn** and **Numpy**
- Performed data analysis on the correlations of performance vs various statistics of English Premier League players using **Pandas** and **Matplotlib**; scraped ~20,000 data points on ~20 web pages by conducting **XML** parsing using **Beautiful Soup**

PROJECTS EXPERIENCE

Travelour - Web based travel planning software — Jan 2023 - Apr 2023
- Developed an AI chatbot to create travel plans through training a model of **RASA**'s generative AI, using ~8,000 dialogues to perform entity extractions and intent classification; implemented a **REST API** to communicate with the frontend using **Python**
- Integrated the web application using **Typescript**, **Next.js**, **Tailwind, SWR** for client-side data fetching, **GCP Firebase** as a **NoSQL** database, **NextAuth** for user authentication, and **OpenAI API** to process unclassified dialogue from users

"Stop Procrastinating" - Personal Productivity Web App — Jun 2022 - Jul 2022
- Developed a task-driven web application that allows users to manage simple effective tasks, and receive timed reminders
- Developed a **REST API** using **Node.j**s, hosted data on **MongoDB**, created the front end using **React.js,** deployed to **Vercel**

ADDITIONAL

Languages: C++/C, Python, Typescript/Javascript, Golang, SQL, HTML/CSS, R
Frameworks & Tools: Git, AWS, GCP, Postman, MongoDB, Node.js, Next.js, React.js, Jenkins, Docker, Jupyter, Vercel, Flask