

# Steven Mao

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Missouri City, Texas

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## Professional Experience

**Software Engineer Intern** | VISA May – August 2023

- Developed end-to-end **Spring Boot** microservice to process VISA business clients into the network
- Performed QA Testing for robustness and unit testing for full coverage with **Junit 5**
- Setup pipeline and deployed service on **Cloudview** in **Docker + Kubernetes** environment
- Implemented data pipelining with **Kafka** for a data validation API to maximize throughput of data
- Experimenting predictive modeling with VISA's raw data, employing RNNs to forecast revenues

**Teacher's Assistant** | TAMU College of Engineering August 2022 – May 2023

- Led recitation of **90+** students and guided them through the process of engineering real-world solutions
- Collaborated with several TAs, spending 5+ hours weekly grading 3 different courses

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## Education

**Texas A&M University**, College Station, Texas August 2021 – May 2025

Honors B.S. Computer Science, Mathematics Minor

GPA: 3.8

Coursework: Data Structures & Algorithms, Computer Organization, Computer Systems, Operating Systems, Machine Learning, Artificial Intelligence, Math Probability, Data Visualization

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## Projects

**Binger: Reader and Library API** Present

*Full-Stack*

- Writing a performance-first **Rust API** using **Axum** that manages a memory-efficient digital library
- Heavily leverages **tokio** async, multithreading, atomic ops, and mutexes to accelerate performance
- Implement a dynamic proxy server that switches to async scraping based on traffic
- Designed a **Svelte/Kit** reader and library UI with **Tailwind**, optimized with SSR and lazy-loading

**Restaurant Kiosk** February – May 2023

*Project Manager*

- Led a 5-man team using **Scrum Framework** to design kiosk software for a restaurant
- Distributed tasks to teammates in 2-week sprints while drafting burndown charts, stories, and backlogs
- Used **React** to design the UI and **Express.js** on **Nodejs** for the API to perform data processing
- Integrated **OAuth2**, routing protection, a weather API, and a recommendation system
- Designed relational data models with **PostgreSQL** and hosted on **AWS**

**Investart: Financial Trading Simulator** January 2023

*Full-Stack – Hackathon 2023*

- Design a stock simulator with LT events, news board, and historical data
- Wrote an opposing **Python** trading bot using various algorithmic strategies: regression, mean reversion...
- Utilized **React** to create a sleek interface and **Express.js** server to facilitate stock API data

Portfolio Websites (2): HTML/CSS/JS hosted on **Github Pages** ([2022 Portfolio](#), [TAMU Portfolio](#)) Jan 2023

Blubot: Music Streaming Discord Bot hosted on **AWS EC2** using Pycord API & FFMPEG decoder July 2022

American Airlines Baggage Prediction: **SKLearn** Ensemble-based (RF) model with ~75% accuracy Nov 2022

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## Skills

- Programming Languages: C++ | Python | Rust | Java | JavaScript | HTML/ CSS | C | Golang | SQL
- Libraries and Frameworks: React | Svelte | Spring Boot | Axum | Kafka | Express | Tailwind
- Technologies and Cloud: Git | AWS | Heroku | Google Cloud | MongoDB | Docker