

# Shuo Li

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## Education

### University of Michigan

Ann Arbor, MI

Computer Science B.S.E 4.0 GPA with Dean's Honor List

2021–2024

**Related Coursework:** Machine Learning, Compiler Construction, Web Systems, Data Structures and Algorithms, Computer Security, Discrete Math, Computing Theory, Computer Architecture, Statistics and Probability, Web Design and Development, Linear Algebra

## Professional Experience

### Internship in Lifelong Learning Lab - Michigan CSE, EZMeeting Project

Ann Arbor, MI

Research Internship (Software Development) - Python, Django, JavaScript, Redis, WebSocket

April 2022 - Now

- Developed and maintained an online video-based meeting tool with realtime transcription with notes.
- Redesigned **Django** models to reduce the response time by 10 times and built **minimap** API in **JavaScript**.
- Wrote **Python** scripts to process and analyze user log data and transcription to learn user behavior.
- Led the deployment of projects of the lab on DigitalOcean and held user study with 120 users.

### Instructional Aide in Intro to Computer Security - Michigan CSE

Ann Arbor, MI

Teaching Assistant - Golang

August 2022 - Now

- Worked in EECS 388 (Intro to Computer Security), a 400+ student course on the main computer science track.
- Taught discussion sections to reinforce conceptual understanding and review course material covered in lecture.
- Tested student understanding of learning goals by devising exam questions and redesigning course projects.
- Collaborated with course staff to ensure the student experience was as smooth as possible.

### Internship in Department of Development & Research, SUNGROW

Anhui, China

Software Engineer (Algorithm Development) - Python

January 2021 - March 2021

- Utilized common machine learning algorithms like **classification**, **logistic regression** and **random forest** and trained models on data management and prediction of performance of three new products.
- Built **modeling APIs** in cross-platform and solved compatibility issues with kernel and environment modifications.

## Projects

### Web Systems Projects

Ann Arbor, MI

React, Flask, SQLite, Hadoop

September 2022 - Now

- Developed an Instagram-like web application using **React** for front-end, **Flask** for back-end, and **SQLite** for database, supporting features like user sign-in, posts and comments.
- Built a multi-worker and fault-tolerant MapReduce server in **Python** which can process user-submitted tasks.
- Implemented a search engine from scratch, based on text segmentation, **Hadoop** MapReduce indexing, and tf-idf scores.

### E-commerce Application for Online Shopping

Ann Arbor, MI

React, Redux, Django, Postgres

February 2022 - March 2022

- Developed an online shopping e-commerce application using **React**, **Redux**, **Django**, and **Postgres**.
- Implemented server-side **REST APIs**, such as user profile service, product review service, shopping cart service and order service using **Django**, and **Postgres**.
- Managed global state with **Redux (Actions Reducers)** and used **Git** as source code version control, and created an extensive back end with **Express**.
- Developed a single page front-end to integrate using **HTML**, **CSS**, **React** with Functional Components & Hooks.

## Skills

**Programming languages:** C++, Python, Java, JavaScript, Rust, R,  $\text{\LaTeX}$ , C, SQL, HTML, CSS, Golang

**Framework:** Spring Boot, Spring MVC, Spring Data, React, Django, jQuery, Ajax

**Database:** SQLite, Mysql, MongoDB, Redis

**Tools:** Git/Terminal, VSCode/IntelliJ