

Mengyan Wu

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EDUCATION

University of Michigan, Ann Arbor, MI USA

Aug 2021 - May 2023

Master of Science in Information

- Courses: Web Design; Building Interactive Applications; Developing Mobile Experiences; Natural Language Processing; Networks; Servers, Shell, and Git; SQL and Databases; Database Application Design

Shanghai Jiao Tong University, Shanghai, China

Aug 2018 - Aug 2022

Bachelor of Science in Electrical and Computer Engineering, Graduated with honors

- McGill University, Canada, exchange program (Jan 2020 - Mar 2020).
- Awards: GDP Explorer Scholarship (2021, top 5%), Student Development Scholarship (2020), Undergraduate Academic Scholarship (2019 & 2020), Wu Jiong Sun Jie Sunshine Scholarship (2019, top 2%).
- Courses: Data Structures and Algorithms; Computer Organization; Programming and Elem. Data Structures

WORK EXPERIENCE

ByteDance (TikTok) Software Engineer Intern

May 2022 - Aug 2022

- Developed, tested, and launched 2 TikTok music campaigns as the tech owner using **Node.js**, **Apache Thrift**, **React**, **TypeScript**, and **SCSS**. These campaigns generated more than 1,000,000 page views.
- Worked together with senior engineers, product managers, and quality assurance teams to build music-sharing web applications using cloud services and **Git**.
- Optimized and encapsulated the web music player module to assure the reusability of the code.
- Written shell scripts for **search engine optimization** (SEO) submission. Increased the targeted website traffic by 5% in a month by submitting ~1.5k hot URLs to Google every day.

Michigan Institute for Computational Discovery & Engineering Student Developer

Feb 2022 - Apr 2022

- Revamped the official website of the Institute with **HTML/CSS** and **JavaScript**.
- Designed a fully tested ETL data pipeline that automatically pulls ~1k data entries from the University's database to update the Institute's database.

Mech-Mind Robotics Software Engineer Intern

Jan 2021 - Mar 2021

- Created a robot dashboard in the robot controller software with **C++** and **Qt** to monitor the operation of over 10 industrial robot arms in the factory.
- Implemented test scripts to compare the output differences among versions of software.
- Trained the industrial robots' image recognition model to improve the accuracy to ~97%.

SELECTED PROJECTS

Capstone Design - Database Management System for Shanghai Tobacco Machinery Co., Ltd.

- Developed a cross-platform desktop application with **Angular** and **Electron**, which could show the real-time warnings and statistics of the tobacco packing machine.
- Constructed the high-performance server with **Golang**, which can deal with over 1000 concurrent simple requests with RAM consumption of only 200MB.
- Used **MySQL** database plus a **Redis** cache to improve the multi-threaded access speed.

Mini Wiki

- Used **AWS EC2** cloud server to host the website with a custom domain name.
- Implemented the website with **Django** and **SQLite3**, which allowed users to upload, store, display, and search data.
- Built log-in features including SSO login via GitHub. Built comment features and bookmark features. Designed the UI with bootstrap.

TECHNICAL SKILLS

- React, Angular, JavaScript ES6, TypeScript, Expo/React Native, HTML/CSS, Redux/Rematch, Axios
- Node.js, Django, Golang, MySQL, Redis, AWS
- Python (NLP/ML), C++, Qt, SQL, Spark, Hadoop, R, MATLAB