

Jingyao Gu

<https://github.com/JingyaoGu1> | 612-787-5598 | jingyao5@illinois.edu

EDUCATION

University of Illinois at Urbana-Champaign

Master of Computer Science

Champaign, Illinois

Expected May 2024

Macalester College

Bachelor of Arts: Applied Maths and Statistics & Computer Science

Saint Paul, Minnesota

Sept 2018 - May 2022

WORK EXPERIENCE

Technical Consulting & Research, Inc.

West Covina, CA (Remote)

Full Stack Web Development Intern

May 2023 - Present

- Led a team of 3 and developed a government website in **React** with role-based access control to provide a secure and user-friendly online platform for accessing government services like filing taxes
- Created secured endpoints using a router and router-controller layers approach powered by **Express** middlewares and **JWTs**, resulting in a 30% reduction in security incidents
- Designed and implemented a user management interface using **Flask**, ensuring efficient user search, data retrieval and comprehensive log/activity monitoring and to prevent DDoS attacks
- Refactored legacy code, reducing the codebase size by more than 50% and optimized website performance, achieving a 30% reduction in load time and enhancing user experience

SkyIT Services | Subsidiary of GBCS Group

West Covina, CA (Remote)

Software Development Intern(part-time)

May 2023 - July 2023

- Gathered data from an IoT fleet management mobile app Komet and used **React** and **Redux** to duplicate into a web application with custom UIs
- Engineered the primary caching service for the application, enhancing data retrieval efficiency and system performances by more than 50%

China National Supercomputing Center

Wuxi, China

Software Development Intern

May 2021 - Aug 2021

- Joined a team with 4 computer scientists from Tsinghua University and worked on databases by monitoring, migrating, and backing up huge amounts of data using Sunway TaihuLight supercomputer, once the fastest computer on earth
- Contributed to the earth system numerical simulations and successfully predicted the medium-term trail of typhoon “Yingwu” with an accuracy of over 70%

SELECTED PROJECTS

Expense Tracker | **React, Context API, Express, MongoDB**

- Developed a feature-rich full-stack website with transaction management, category management, advanced filtering, interactive charts
- Integrated multiple third-party APIs, including the Verify API for text extraction and Cloudinary for receipt image uploading to streamline expense data entry

Stock Market Analyzer | **React, Context API, Express, Keras, Flask**

- Leverages the Finnhub API for stock-related functionalities, including advanced search and interactive visualizations
- Integrated predictive capabilities using LSTM and ARIMA models to forecast next-day and next-month stock prices, ensuring efficient performance with limited data

Music Orchard | **Swift**

- Designed user interfaces, and original graphics/sound for an IOS app that teaches children about music

ADDITIONAL

Technical Skills: Advanced in Python, Javascript, HTML/CSS, SQL; Proficient in Java, R

Software Development: React, Redux, Flask, RESTful APIs, Git, Node.js, Express.js, AI models, AWS, API Integration