Christopher Miao

cgmiao258@gmail.com
(630)441-3039
cgmiao258.github.io

Education

Masters of Science in Computer Science   Expected May 2025
University of Minnesota Twin-Cities (GPA 3.7/4.0)
Bachelor's of Science in Civil Engineering and minor in Computer Science   May 2023
University of Illinois Urbana-Champaign

Skills

Programming: Java, C++, Python, SQL, MongoDB, Software Testing
Framework Tools: CSS, HTML, Python Flask, GitHub
Languages: English (Native) and Chinese (fluent speaking and reading, intermediate writing)

Experiences

Engineer Intern at Village of Bolingbrook, IL   May 2023 - August 2023
- Assisted senior engineers in field work and completed projects in CAD for clients

Engineer Intern at City of Naperville, IL   May 2022 - August 2022
- Assisted and work with senior engineers oversee construction work
- Aided senior engineers in design and CAD projects

Engineering Intern at Dupage County DOT   May 2019 - August 2019
- Responsible for reviewing highway permits, processing work orders, answering customer service calls, and organizing documents.

Projects

Flashcards AI   February 2025 - May 2025
- Built a React frontend and Flask backend for handwritten note uploads and AI-driven flashcard generation
- Trained a PyTorch model on a formatted Kaggle trivia dataset for flashcard prediction
- Integrated ChatGPT API to convert handwritten notes to text

PostgreSQL Modifications   January 2024 - May 2024
- Modified open source C++ database management system
- Changed replacement policy to alternate between FIFO, LRU and MRU
- Forced query selection to be nested loop, merge sort or hash join to compare performance
- Wrote indexes with B+ tree and hash indexes to compare performance

Voting System Software Engineering Project   September 2023 - December 2023
- Used waterfall and agile scrum methodologies to create a voting system
- The voting system written in C++ and included doxygen tests
- Ran mock waterfall activities while creating voting system
- Added improvements/changes to created system by running a mock agile scrum sprint

Personal Project: Movie Finder   July 2023 - August 2023
- Created a website that allows user to search for different movies
- Converted IMDB API into database in mysql using mysql workbench and AWS
- Used Python, Python Flask, CSS, HTML and MYSQL