

Alan Liang

Computer Science & Environmental Studies

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Education

University of Wisconsin-Madison

Madison, Wisconsin

B.S. in Computer Science & Environmental Studies

09/2022 - 05/2026

- GPA: 3.977/4.0
- Certificates: Data Science & Game Design

Coursework: Data Structures, Machine Organization & Programming, Operating Systems, User Interfaces, Intro to Algorithms, Geoinformation Systems, Geodatabases

Extracurriculars: Chinese American Student Association (Copresident), Code to Connect (Outreach Chair)

Experience

Computer Science Peer Mentor

09/2024 - Present

University of Wisconsin-Madison | Madison, WI

- Guided 300+ students to gain proficiency in HTML, CSS, **Javascript**, **React.js**, and **React Native**
- Assist students in setting up and deploying websites using Docker & SQLite
- Mentor peers in cybersecurity fundamentals to prevent XSS and SQL injection

Beach Ambassador Technology Intern

06/2023 - 06/2024

University of Wisconsin Sea Grant | Milwaukee, WI

- Developed the Beach Ambassador website iteratively using **HTML**, **Javascript**, **CSS**, and WordPress
- Interacted with 500+ beachgoers to promote beach safety along the lakefront and at city wide events

Instructor

03/2020 - 06/2020

Mathnasium | Milwaukee, WI

- Worked as a team of 8+ instructors to support the learning of more than 100 students daily
- Actively engaged with the community at local events to spark interest in mathematics

Projects

GreenLens | Pytorch, React, Flask, Tailwind

11/2024

- Crafted and drew a flawless UI for a trash vs recycling image app with React, framer-motion, and Tailwind
- Trained an image recognition model using Resnet50 on CUDA GPU with 10,000+ images
- Used Flask to manage data communication between frontend and AI model

Custom Unix Shell | C, Unix

10/2024

- Created a custom shell in C to support basic shell features such as fork, environment variables & history.
- Allow file redirection to and from standard files as well as custom files using file descriptors

SpotLight | React, Databases, Node.js

8/2024

- Developed an appealing electronic press kit (EPK) networking app for musicians with React
- Awarded **2nd place** at Empower 2.0 Hackathon, on the SonicBids track
- Used a NoSQL database to store user information as well as support chatroom features between users

EmptyFridge | React Native, HTML, Javascript, REST API

3/2023

- Awarded **1st place** at UW-Madison Hackathon for best Sustainability Hack
- Implemented REST APIs to allow users to input a variety of 100,000 ingredients to query 5,000+ recipes.
- Upgraded static web app to React Native mobile app to reduce size by 99.4% and improve convenience

Skills

Programming Languages: Java, C, Javascript, HTML, Python, R, SQL

Tools and Frameworks: Git, Unix, PostgreSQL, React.js, React Native, ArcGIS, PostGIS, Bootstrap, Tailwind

Languages: English (native), Chinese (Fluent), French (Intermediate)