# Alan Liang

alanliang905@gmail.com | 1-414-688-7918 | www.linkedin.com/in/alan-liang5 | github.com/liang-alan

#### **Education**

## **University of Wisconsin-Madison**

2022 - Present

BS in Computer Science & Environmental Studies

- GPA: 3.955/4.0
- Coursework: Data Structures & Algorithms, Data Ethics, Machine Organization, Operating Systems, UI/UX, Neural Networks, Software Development, GIS, Geodatabases

## **Experience**

#### Software Engineer Intern, Amazon – Sunnyvale, CA

May 2025 - Aug 2025

- Migrated an outdated service to a modern platform using React, TypeScript, and Express
- Cut monthly support tickets by 50% by implementing new features to reduce manual workload
- Delivered a full-stack, **end-to-end project** from design to production in an agile environment
- Implemented comprehensive unit tests, achieving 95%+ test coverage to ensure code quality and stability
- Set up user metrics using AWS Cloudwatch to track adoption and identify bottlenecks

UI/UX Peer Mentor, University of Wisconsin-Madison - Madison, WI

Sep 2024 - May 2025

- Guided 500+ students to gain proficiency in HTML, CSS, Javascript, React, and React Native
- Assist students in setting up and deploying websites using Docker & SQLite
- Mentored peers in cybersecurity fundamentals to prevent XSS and SQL injection

Beach Ambassador Technology Intern, Wisconsin Sea Grant - Milwaukee, WI

Jun 2023 - Jun 2024

- Engaged with 500+ beachgoers at lakefront and citywide events to promote water safety awareness
- Developed the Beach Ambassador Resources Website using HTML, improving accessibility of program resources
- Advanced environmental justice initiatives by engaging underrepresented communities and addressing racial disparities in access to safe recreational spaces

## **Projects**

GreenLens Nov 2024

- Crafted a seamless UI for a trash vs recycling image detection 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 Oct 2024

- Created a custom shell in C to support basic shell features such as fork, environment variables & history.
- Managed disk storage using RAID0 and RAID1 configurations

SpotLight Aug 2024

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

EmptyFridge Mar 2023

- Awarded 1st place at UW-Madison Hackathon for best Sustainability Hack
- Onboarded 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

Languages: Java, C, Javascript/Typescript, Python, R, SQL

Frontend: HTML, React, React Native, Bootstrap, Tailwind

Backend: Express.js, REST APIs, AWS Lambda, PostgreSQL, Node.js, Flask, MongoDB, Google Firebase

**Tools & Platforms:** Git, GitHub, Jupyter Notebook