Sewon Sohn

San Jose, CA | sewonsohn00@gmail.com | (458) 273-7910 | Portfolio | LinkedIn | GitHub

Education

University of Oregon, Eugene, OR (Sep 2021 – Jun 2025) | Bachelor of Science in Computer Science; GPA: 3.7

University of Sheffield, Sheffield, UK (Sep 2023 – Jun 2024) | Exchange Program

Relevant Courses: Al for Networking and Security, Software Engineering, Software Testing, Intelligent Web, Software Reengineering, Data Structures, Algorithms, Operating Systems, Linear Algebra

Skills

Programming Languages: Python, C, JavaScript, HTML, CSS

Frameworks/Libraries: Flask, Node.js, Express, Bootstrap, OpenCV

Tools/Technologies: Docker, Docker Compose, Git, MongoDB, PostgreSQL, Socket.IO, RESTful APIs

Experience

Marketing Director (iNight) & Executive, International Student Association, University of Oregon (Jan 2022 – Jun 2023)

- Coordinated team operations and marketing strategies for a campus cultural event that sold out with 200+ attendees
- Boosted Instagram engagement and brand consistency, growing followers by ~300 in 8 months

Learning Assistant, Computer Science Department, University of Oregon (Sep 2022 – May 2023)

- Hosted weekly office hours to clarify C/Unix/data structures concepts and assist students with coding assignments
- Coordinated with instructors to evaluate student feedback and improve course structure

Projects

Local RAG Assistant (2025 - Present)

- Developing a fully local Retrieval-Augmented Generation (RAG) demo to solidify core understanding of LLM pipelines
- Using **Ollama**, **FAISS**, **nomic-embed-text**, and **Streamlit** to process markdown-based university data, generate vector embeddings, and enable local Q&A with **Mistral**

Eco-CI Integration Project (2025)

- Worked with **Intel** engineers to reduce the carbon footprint of CI/CD pipelines by integrating Eco-CI, an open-source GitHub Action for energy and emissions tracking
- Automated the Eco-Cl integration and applied it across 10+ GitHub workflows by developing a Python script using ruamel.yaml, storing the results in a PostgreSQL database via PostgREST

Class Schedule Planner, QuackHacks (24-hr Hackathon, 2025)

- Developed a Flask web application to identify common free time between uploaded HTML class schedules, using
 BeautifulSoup for parsing
- Collaborated in a five-person team, using Cursor for AI assistance and Git for version control

Petition Digitization App, HackUO (24-hr Hackathon, 2024) – Honorable Mention

- Created a full-stack application that automates text extraction from PDFs of handwritten petitions
- Implemented an image preprocessing pipeline using OpenCV and PIL to optimize scanned document quality for OCR

Plant Recognition Web Application (2024)

- Engineered a full-stack app with **Node.js, Express, MongoDB**, and **Bootstrap** for managing plant sightings, featuring user authentication and editable plant pages
- Added a real-time chat with Socket.IO and optimized routing to ensure smooth form handling and data flow

Brevet Time Calculator (2023)

- Built a full-stack **Flask** web app to calculate cycling checkpoint times using custom timing algorithms and real-time form updates via **Fetch API**
- Developed a RESTful API, stored historical data in MongoDB, and containerized the app with Docker Compose for scalable deployment