Seung-Gu Lee

Passionate computer science student with over 8 years of programming experience and well-developed teamwork skills seeking for a software engineering internship for Summer 2024.

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Portfolio: https://sgl.dev/
Github: https://github/sgl33

Education

University of Michigan - Ann Arbor, MI   May 2025
Bachelor of Science in Engineering (B.S.E) in Computer Science

- Cumulative GPA: 3.84 / 4.0
- Minor in Civil Engineering - Mobility Systems Engineering track
- **Relevant Coursework**: Data Structures & Algorithms, Computer Vision, Intro to Computer Security, CS Pragmatics, Robotics Mechanisms, Differential Equations, Linear Algebra

Technical Skills

Languages: C++, JavaScript, Swift, Java, Python, HTML, CSS, SQL
Platforms/Framework: SwiftUI, React, Node.js, Firebase, Unity, Arduino
Tools: Git/Github, Unix, Linux, LaTeX

Work Experience

Dynamic Project Management (DPM) Lab - Ann Arbor, MI   Apr. 2023 - present
Research Assistant

- Developed an **iOS** frontend application using **Swift** and **Firebase** that automatically collects data from external IMU sensors when walking, detects fall risks, and prompts live feedback integrating **Agile** methodology
- Developed the **Node.js** backend using **Express.js** and deployed it on an **Ubuntu** server on **GCP** to run machine learning models, send remote push notifications, and more
- Improved an existing iOS application, addressing bugs, redesigning user experience, and adding new features and created an admin-side web panel with **React**
- Led meetings with researchers at DPM Lab and Liberty Mutual Insurance to discuss progress and deployed apps on TestFlight utilizing **CI/CD** pipelines
- Developed web scrapers and data processors with **Python** to create training datasets for the **computer vision** model and assisted researchers with training the AI model, won 1st place in national ASCE datathon 2023

DesignOC - Remote   Jun. 2020 - Jul. 2020
Web Development Intern

- Maintained/upgraded the company website using **HTML**, **CSS**, and **JavaScript** and increased visibility on search engines
- Collaborated with other engineers to assist with automating repetitive tasks

Project Experience

KAMS Hub - *Independent Project*   Nov. 2021 - May 2022

- Created an online learning management system for the school with **HTML**, **CSS**, **JavaScript**, **Java**, and **MySQL** and deployed the application on an **Ubuntu** server on **AWS**
- Improved administrative efficiency by saving over 2 hours per week of repetitive manual work

Hexagon Defense - *Independent Project*   Feb. 2020 - Jun. 2021

- Designed and programmed the video game with **Unity** and **C#**, incorporating third-party APIs and SDKs
- Communicated with professional identities and government authorities to publish on **Nintendo Switch** and **Google Play**, reaching to over 1,000 unique users in the first month of release

Activities

- Tech for Social Good - *Member*   Sep. 2022 - present
- Michigan Hackers - *Member*   Sep. 2022 - present
- Anthro Art Association - *Member*   Apr. 2023 - present
- KAMS Vex Robotics Team - *Programmer / CAD designer*   Jan. 2022 - May 2022