

# SUNWOO LEE

• Software Engineer •

✉: [sunwoo9078@gmail.com](mailto:sunwoo9078@gmail.com)

🌐: [linkedin.com/in/sunwoo-lee-sw1](https://www.linkedin.com/in/sunwoo-lee-sw1)

☎: 010-7762-2236

📄: [sunnew-lee.github.io/Portfolio](https://sunnew-lee.github.io/Portfolio)

## TECHNICAL SKILLS

### Languages

- C++, OpenGL, GLSL, C

### IDE/Engine

- Visual Studio, VS Code, Unreal Engine 5

### Tools/Libraries

- Github, Dear ImGui, React Native, Android Studio

## EDUCATION

### Bachelor of Computer Science in Real-Time Interactive Simulation

Apr 2024

- DigiPen Institute of Technology, Redmond, WA, USA

### DigiPen Game Engineering department(DigiPen-KMU Special Program)

Aug 2024

- Keimyung University, Daegu, Republic of Korea

## ACADEMIC PROJECTS

### AI Programmer & Producer

Sep 2022 - June 2023

BEAR - 3D puzzle platformer

- Developed a Drone-like enemy AI utilizing Blueprint Behavior Tree to enhance player engagement and add depth to gameplay mechanics.
- Implemented destructible floor mesh to elevate environmental interactivity and dynamic gameplay experience
- Conducted three play test sections and organized feedbacks to find bugs and gain insight from different perspectives that could improve user experience

### Graphics Programmer

Mar 2022 - June 2022

3D Graphics Engine

- Loaded 3D objects consisting triangle polygons and simulated visual effects such as lightening, fog, noise and shadowing by C++, OpenGL and GLSL
- Organized the code structure using inheritance to enhance maintainability and scalability
- Implemented Dear ImGui for parameter tweaking and scene switching to improve debugging efficiency

### Programmer & Producer

Sep 2021 - June 2022

BIT SAVER - 2D rhythm action side scroller

- Developed custom singleton engine based on C++, OpenGL using Visual Studio 2019
- Implemented font rendering using FreeType library to strengthen game comprehension for players
- Analyzed and implemented code for extracting MIDI file datas to synchronize between the game and music
- Documented game design and tech architecture in order to collaborate with designers and engineers to sustain project direction and objectives
- Planned milestones and weekly status reports throughout the project to enhance team productivity and time management

## WORK EXPERIENCE

### Software Engineer Intern

Jan 2024 - Apr 2024

A Round Entertainment, NJ

- Participated in the development of a social networking application, 'Joopi'
- Utilized Android Studio, React Native, and Firebase to build the Android version of the application
- Managed the team by weekly meetings and reorganizing tasks to enhance productivity as a team lead