Seonghwan (Hwany) Oh

+1 (912) 940-7067 | soh9886@sdsu.edu | linkedin.com/in/hwanyo | fivestar1103.github.io/portfolio
Eligible for summer internships in the U.S. via the J-1 Visa Academic Training Program.

EDUCATION

San Diego State University (Exchange Program)   Jan. 2025 – May. 2025
*B.S. in Computer Science (**Exchange Semester**)*   *San Diego, CA, USA*

University of Seoul | *Cumulative GPA: 3.58*   Mar. 2019 – Feb. 2026
B.S. in Computer Science, Minor in Data Science   *Seoul, South Korea*
(Degree extended due to mandatory military service as Republic of Korea Air Force interpreter, Feb. 2021 – Nov. 2022)

PROFESSIONAL EXPERIENCE

Unity Developer Intern | *Skills: Unity, C#, Shader, Vuforia Engine (AR), Figma*   Aug. 2024 – Oct. 2024
Mobile App Development Cooperation   *Seoul, South Korea*

- Built and published two mobile games on **iOS** & **Android** platforms using **Unity**:
  Ppukku's Grand Adventure: Grow Longer! (iOS) | Ppukku's Grand Adventure: Catch It! (iOS)
- Implemented **DFS-based surround detection**, **object pooling**, and **physics-driven** interactions to boost **performance** by 35%.
- Authored **technical guides** and **debugging instructions** to streamline **onboarding** processes.

Research Assistant Intern | *Skills: Data Analysis, SQL, Flask, Javascript, GCP*   Dec. 2022 – May. 2023
SKYGG   *Seoul, South Korea*

- Assisted in building a **Web3 gaming playground** and **blockchain analytics platform**.
- Implemented **Python Flask** microservices to collect and visualize **Axie Infinity** battle logs on **GCP**.
- Utilized **MySQL** for storing real-time player data and generating interactive dashboards.

PROJECT EXPERIENCE

Game Programmer | *Skills: Unity, C#, Systems Programming, CSV Data Handling*   Mar. 2024 – Current
GameMakers (Unity Certified Game Developers Club) 8th – Team Fate   *Remote*

- Developing a **Unity 2D escape-room game** with a **6-member team**, targeting a March 2025 release.
- Created an **event-driven architecture** enabling flexible customization of in-game states via CSV scripting.
- Implemented a **cylindrical lock dial** using trigonometry and real-time checks for puzzle progression.

Procedurally Generated Puzzle Adventure with Speech AI | *Skills: Unity, C#, PCG*   Sep. 2024 – Dec. 2024
Capstone Project in Computer Science / Team Leader   *Seoul, South Korea*

- Designed and implemented **procedural content generation** algorithm utilizing **Cellular Automata**, **Delaunay Triangulation**, **Minimum Spanning Tree** (MST), and **A* search** to create dungeon maps.
- Integrated **Speech-to-Text** (STT) and **Speech Emotion Recognition** (SER) technologies to enhance interactivity and emotional engagement within the game.
- Led team coordination on **project integration**, **version control**, and prototype development.

TEACHING EXPERIENCE

Tutor – Support for International Students   *University of Seoul* Sep. 2024 – Dec. 2024
Provided structured guidance on **programming**, **data structures**, **debugging**, and **algorithms**.

C Programming Tutor   *University of Seoul* Apr. 2024 – Jun. 2024
Instructed **C essentials**: arrays, binary arithmetic, pointers, recursion, and Linux-based compilation.

TECHNICAL SKILLS

Programming Languages: C/C++, C#, Python, JavaScript

Game Dev: Unity, Physics-based mechanics, Raycasting, Pathfinding Algorithms (A*, DFS, BFS)

Backend/Databases: Flask (Python), MySQL, Google Cloud Platform (GCP)

Web/Frontend: React, HTML5, CSS3

Tools & DevOps: Git/GitHub, Linux (Bash), GCC, Figma, Notion, Slack

Other Expertise: Systems Engineering, Troubleshooting, OOP, Vuforia (AR), Procedural Content Generation

HONORS & AWARDS

Silver Award (3rd) – University of Seoul Programming Contest (UOSPC) 2024

Excellence Award (2nd) – University of Seoul Plankton Hackathon 2024

Grand Prize (2nd) for Best Games – GameMakers 8th Cohort