

# Sangbeom Kim

Graphics / Gameplay Programmer

neoeirc0519@gmail.com | (425) 410-8972 | <https://sangbeom-kim.github.io/> | <https://www.linkedin.com/in/sangbeom-kim/>

## Skills

---

**Programming languages:** C/C++ (Memory Management/Data Structures), C#

**Tools:** OpenGL, GLSL, JSON, Perforce, Github (Version Control)

**Technical Skills:** Gameplay programming, UI/UX programming, Shader programming, Debugging

**Engines:** Unity (Shader Graph, Physics), Unreal Engine 5 (Custom Shaders/C++ Scripting)

## Academic Projects

---

### Gameplay Programmer / Tech Lead

September 2024 ~ Present

Shuttlefall – Unreal Engine 5

Team of 10

- Collab team game project with artists and designers, currently in development.
- Worked on game's main control system, in-game terminal interaction, UI/UX programming, shop and upgrade system, and overall debugging and polishing of the whole game.
- Contributed to custom depth shader programming, widget blueprint projection to in-game screen, game loop programming and system design.

### Gameplay Programmer / Tech Lead

August 2021 ~ June 2022

Spy the Man – C++

Team of 4

- My first team game project, which motivated me as a graphics programmer with its technical challenges.
- As a tech lead, I was in charge of implementing the game's graphic engine and physics simulation, while also distributing appropriate workload to our teammates.
- Contributed to OpenGL implementation of 2D images, fonts, and animations, along with in-game programming, particle system design, level design, and illustration of game art assets.

### Graphics Developer

March 2022 ~ June 2022

OpenGL Graphics Project – C++

Team of 2

- Collaborated on a graphics project as a part of an OpenGL course.
- Implemented 3D meshes with vertex, tessellation, geometry, and fragment shaders, applied mapping to mesh surfaces, created 3D spline curves, and used Z-buffering for shadow projection.
- Contributed to 3D mesh buffering, shader programming, and various OpenGL implementations.

## Personal Projects

---

### Gameplay Programmer

September 2022

The Balloon Adventure – Unity

Team of 3

- This game began as a school project, which our team later decided to remake in Unity after graduation.
- Submitted to a game contest in South Korea, where it won a prize and was showcased on the city homepage.
- Contributed to Unity shader programming, gameplay mechanics, particle system customization, level design, and illustration of game art assets.

## Education

---

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

DigiPen Institute of Technology, Redmond, WA

Expected graduation: April 2026