# JAY (EUNJIN) HONG

Software Engineer / Gameplay Programmer

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# **SKILLS**

# **Programming Languages**

C, C++, C#

#### **Tool / Frameworks**

Unity, Unreal Engine, Git, Tortoise SVN, Visual Studio, Linux, Sublime, Dr.Memory/Valgrind, Photoshop

#### Technical skills

Behavior Trees, Algorithm Analysis, Data Structures, Debugging, Game Development, Technical Game Design

# **TEAM PROJECTS**

# **UNITY DEVELOPER:** *Unannounced Project* – Unity (C#)

June 2023 - Present

- Scripted prototype including UI and audio manager with Unity, C# languages using singleton design pattern.
- Tracked a team of 100+ by mediating communication between team of art, UI, audio, and design.
- Handled repository control using Git to manage teammates progress.

# AI / GAMEPLAY PROGRAMMER: Scrap and Battery (Steam) – UE5 (C++), Team of 9 Aug 2022 – Apr 2023

- Established basic enemy finite-state machines to be used as an AI architecture for variety types of enemies
- Created behaviors for 2 distinct enemies using Unreal Engine's Behavior Tree and C++.
- Implemented character movement animations using animation blueprints.
- Constructed game flow, level, and enemy designs along with documentations based on prototype and feedbacks.

# PROGRAMMER / LEAD DESIGNER: PooPooPiPe – Custom Engine (C++), Team of 4 Sep 2019 – Jul 2020

- Made custom engine from scratch using DirectX, SDL2, and C++.
- Programmed engine's audio system with play, pause, repeat, and volume control using C++ and FMOD.

#### **GAMEPLAY PROGRAMMER:** MaG+NeT – Proprietary Engine (C++), Team of 4

Mar 2019 - Jul 2019

- Scripted basic player controls with input handling using C++.
- Implemented and designed game UI and visuals: main menu, credits, splash screen, and game clear screen.
- Designed puzzle systems using pull and push mechanics which leads cooperative gameplay of two players.

# SOLO PROJECTS

#### GAME DEVELOPER: Isolation - UE5 (C++)

Oct 2022 - Dec 2022

- Scripted player controls along with first-person camera and object interactions using C++ and blueprints.
- Built finite-state machine used as an AI architecture for a single enemy allowing strategic gaming.

# GAME DEVELOPER: Club Wrecker - Unity (C#)

Apr 2022 - July 2022

- Developed Al architecture for enemies with C# and state machines of Unity engine.
- Implemented ray cast detection of enemy AI visions, visualizing vision cones using Gizmos.
- Constructed 3 levels to test enemy behaviors reacting on player's locations.

# **EDUCATION**