HyunJoon Kim

857-891-3063 | <u>kim.hyunjoo@northeastern.edu</u> | <u>Github</u> | <u>Personal Website</u> Availability: May 2023- August 2023

EDUCATION

Northeastern University, Boston, MA

2017 Fall - 2023 Winter

Khoury College of Computer Sciences

Candidate for a Bachelors of Science in Computer Science and Game Development

Courseworks: Fundamentals of Software Engineering, Algorithms and Data, Object Oriented Design, Game Programming, Programming in C++, Database Design, Discrete Structure, Linear Algebra, Calculus II, Computer Systems, Game Capstone

Skills

- C# | C++ | Python | C | MySQL | Java | TypeScript | React
- Unity | Git | Linux | MySQL workbench | Jupyter-notebook | Clip studio | Ren'Py

WORK EXPERIENCE

Sergeant, Software Engineer

Republic of Korea

12/2019 – 06/2021

- Repaired software and systems to support confidential operations
- Automated manual processes, reducing work time by 60%
- Optimized a web database to improve the utility and organization of operation-critical data
- Developed and implemented an algorithm to extract information from contaminated binary data

PROJECTS

Pong3D (Unity3D) November 2022

- Enhanced the classic Pong game with 3D graphics and advanced gameplay mechanics
- Utilized 3D math to accurately calculate ball bounces and player movement
- Optimized code performance through the use of callback functions
- Built upon previous experience with scriptable objects and Ability Systems to extend gameplay functionality

VolleyBullet (Unity3D+ NetCode)

September 2022 – December 2022

- Developed a matchmaking system for seamless online multiplayer gameplay
- Implemented a scriptable objects-based Ability System
- Designed a modular maintainable, and scalable game architecture

Therapist Game (MySQL + Python)

September 2021 – December 2021

- Built a GUI that integrates with MYSQL database server
- Ensured data integrity and organization with a well-structured database
- Created a comprehensive program design for player interaction

Zombie Defense Shooter (Unity3D)

January 2022 – April 2021

- Implemented engaging gameplay mechanics, including resource management-based grid building and FPS mechanics
- Optimized game performance through efficient use of data structures
- Developed advanced enemy AI using State Machines

Project Z (Unity2D+ Android)

August 2019 – December 2019

- Designed an inventory system, store, and in-app purchases for player engagement
- Improved data management through JSON serialization
- Gained experience in mobile game development, release, and optimization

JamOLantern (Game Jam, Ren'Py)

October 2022 - Present

- Biggest team collaboration with programmers, script writers, song writers, composers, and artists
- Opportunity to learn how Ren'Py works and programmed visual novel based on stories developed
- Gave major ideas of what to start with, gave feedbacks on arts, asked approval of the built game

INTERESTS

VR/AR Development, Machine Learning, Content Design, Illustration Drawing, Artificial Intelligence, Apocalypse, 3D Math, Making Cool Games