Oh Bum Jun

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Highly motivated and results-oriented Software Engineer with 2+ years of experience in C/C++/C# programming and STL, specializing in game engine architecture and performance optimization. Proven ability to design, develop, and implement robust and efficient client-side game systems, including experience with game engines like Unreal. Possesses extensive experience in developing proprietary engines. Strong analytical and problem-solving skills with a focus on optimizing game performance, debugging, and improving overall player experience. Eager to contribute to the development of innovative and engaging gaming experiences within a collaborative and dynamic team environment

OUALIFICATIONS

- Proficient in C/C++/C# and STL with over 2 years of experience in C/C++ based game engine development
- **Proficient in developing core game engine systems**, such as event systems, real-time file watcher, garbage collectors, audio systems, ECS, image compression(DXT, ASTC, ETC2), custom parsers(Json,Binary, Yaml) and multithreading optimizations.
- Expert in tool development using compiler APIs, including Clang and Roslyn, delivering features like C/C++ runtime reflection, C# to C++ conversion tools

PROFESSIONAL EXPERIENCE

Com2us | Seoul, South Korea

Junior Game Engine Software Engineer, Jan 2023 ~ Present

- Developed custom parsers and serialization logic for various formats (JSON, YAML, Binary, CMake)
- Implemented various game engine features leveraging multithreading, including real-time file watching, multi-threaded updates(JobSystem), and asynchronous data loading.
- Optimized image assets for real-time rendering with DXT, ASTC, and ETC2 compression
- Achieved 2.0 GB reduction in memory usage by optimizing memory allocator system using various forms of memory pools
- Accelerated Unity game code porting by at least 2 weeks through Roslyn-based C# to C++ conversion tool
- Improved development efficiency by developing C/C++ runtime reflection system using Clang Compiler API
- Achieved substantial reduction in crashes up to 55% through the implementation of object handle system
- Achieved 0.13 second improvement in game loop performance when processing 10,000 entities by optimizing both multithreading Job System and Entity Component System (ECS)

Korea Gap Year | Seoul, South Korea

Web Programmer Intern, Sep 2020 ~ Dec 2020

• Developed both the front-end and back-end of company's new website using JavaScript, Node.js, MongoDB, HTML, and CSS

PROJECT

C/C++ Based Own Game Engine | Com2us | Jan 2023 ~ Dec 2024

Developing C/C++ based proprietary game engine along with 15 team members

Dungeon Delivery (Android) | **Com2us** | Jan 2024 ~ May 2024

Launched game on Android market using proprietary game engine along with 15 team members

EDUCATION

School: Chung-Ang University | Seoul, South Korea | Mar 2014 ~ Aug 2022 | GPA: 4.0 / 4.5

- Major in "Psychology", Double Major in "Statistic Based AI"
- Relevant courses: C Programming, Data Structure, Algorithm, Graphic Programming (OpenGL), Software Engineering, Numerical Analysis, Data Mining

Credit Bank System | Apr 2024 ~ Feb 2025 | B.S. Candidate in "Information and Communication Engineering" | GPA: 4.29 / 4.5

• Relevant courses: Computer Network, Database, Introduction to Information and Communication, Operating System, Computer Architecture, System Programming

Game Client/Engine Programming Academy: AssortRock Game Academy | Seoul, South Korea | July 2021 ~ Dec 2022

Developed game client/engine using C/C++, WinAPI, DirectX11

Purdue University IOT Summer Program: Purdue University | Seoul, South Korea | June 2021 ~ July 2021

• Developed Solar Sensor IoT project with a team of four members

Web Programming Academy: Sparta Coding Club | Seoul, South Korea | Mar 2020 ~ May 2020

• Developed Web program using Html, Css, Javascript, MongoDB, Python

Studied Abroad | July 2006 ~ Aug 2007 to California in USA

ACTIVITIES

 $\textbf{English Debate Club} \mid \text{Jan 2016} \sim \text{Dec 2016} \mid \text{Participated in the International English Debate e.g., 2016}. \label{eq:english Debate Club}$

TECHNICAL COMPETENCES

Programming Languages: C#, C++, C Graphics API: OpenGL, DirectX11 Operating Systems: Windows

Compiler API : Clang (C/C++), Roslyn (C#)

CERTIFICATES & OTHER SKILLS

Certificates

• CLA(C Language Global Certification), CPA (C++ Language Global Certification), SQLD (Database), Linux Master Level 2 (Linux), Network Administrator Level 2 (Network), Engineering Information Processing (Programming)

Languages:

• English: Business Level Proficiency