

Cover Letter

At my parents' suggestion, I went to study abroad in Canada after completing the first semester of Grade 7 in Korea. I graduated from Bayview Middle School and continued my education at Niagara Christian Community of Schools. From Grade 9 to Grade 12, I was named an Honour Roll student every year, which led to my admission to the University of Toronto, where I majored in Computer Science, Mathematics, and Statistics.

I have enjoyed playing games since I was young and was relatively good at them, but they remained just a hobby. While attending the University of Toronto, Overwatch became a global hit, and I happened to join a student club created by a friend. Not long after I started playing seriously, I reached the top 200 in the North American server. On the following year, our club team placed 2nd among approximately 500 teams in North America in the Tespa Collegiate Series: Overwatch 2016 tournament hosted by Blizzard Entertainment, with a total prize pool of \$102,000 USD. This period marked the point where my interest in games began to grow beyond a casual hobby.

After returning to Korea to fulfill my mandatory military service, the outbreak of the COVID-19 pandemic caused a delay in my service, and outdoor activities became heavily restricted. During this period of unexpected downtime, I naturally returned to gaming, which had always been a hobby. While playing Apex Legends, I achieved 1st place on the Korean server and ranked 31st globally. As a result, I received offers from several professional esports teams. However, knowing that the career span of a professional gamer is relatively short—and considering that I had always approached games not just as a player but with a mindset of questioning what systems or mechanics could make them better—I began to feel a growing desire to be more deeply involved in game creation. This mindset ultimately led me to pursue the path of a game developer.

To realize this passion, I enrolled in the Game Programming program at George Brown College and resumed my academic journey in earnest. Beyond completing the minimum requirements for regular classes, I paid particular attention to implementation quality and structural design, continuously building my development capabilities. I was named to the Dean's Honour List every semester and graduated with honours with a GPA of 3.98 out of 4.0. During my studies, I was selected by a professor to mentor and tutor junior students, which helped me further develop my communication and collaboration skills.

Throughout my coursework, I developed games of various genres using the Unity engine and also explored Unreal Engine to broaden my understanding of commercial game engines and workflows. I also gained experience with low-level graphics APIs such as SDL2, OpenGL, and DirectX through basic rendering implementations.

After graduating from George Brown College, I became fascinated by the memory management, performance control, and low-level programming approach of C++, which led me to design and develop a 2D game framework based on SDL2. This framework was not a copy of open-source code found online, but a product of deep consideration about what architecture would be needed in a real game, which data structures would be appropriate, and how best to modularize the system. I implemented core features from scratch, including an ECS (Entity Component System), UI widget system, and quad-tree optimization for collision

detection. Through this, I gained hands-on experience in architecture design, debugging, and performance optimization.

I believe that games are a powerful medium that connects the world beyond borders and language. With a deep passion for games, fluency in both Korean and English, and proven technical skills, I am confident that I can contribute meaningfully in a global development environment. As a member of your team, I hope to create meaningful games with responsibility and enthusiasm.

You can find my regularly updated projects and technical experience at the following site.
<https://woo95.github.io/Devhub/>

I look forward to the opportunity to contribute as a member of your company.
Thank you.

Sincerely,

Chaewan Woo