Personal Statement

Creating a service that improves the quality of life has a been goal for years. Throughout my late adolescence in high school through my military service terms I have been working towards equipping myself with the knowledge of informatics. In the military my curiosity for learning about programming concepts began with a fellow soldier during a spare time. I started from making a Tetris-like game with Python and explored other languages and technologies. After this spark, I later discovered a nationwide programming club recruitment called "Likelion" during the military service years and was eager to be involved with this organization. After being selected as a member of the club, I took a year and a half off from university to grow this club and focus on numerous programming-based projects such game, web and app development.

Initially, game development caught my highest interest among other areas of programming. I quickly learned that game development can have some of the most challenging and demand diverse programming skills, but I was eager to accept this challenge. I participated in a "Game Jam" by Smilegate in 2016 and met lifelong colleagues that I would work with for the next two years. During three days of a Hack-a-thon, we created a demo version of a puzzle game called Nabla(∇) using Unity and its physics engine and was chosen as best 3 among other competitive games. We continued to finish this game and published it at Google Play Store. Although this did not end up becoming a hit game, this experience allowed me to feel how harsh indie-game development field is and at the same time how a person's passion can overcome this environment.

I mainly worked and taught as a web developer during this period. Among many project, a website called "Classlion" that was for rating university courses was definitely the most valuable one in my life. It was also a project that meant to have a powerful support and funding by the owner of the largest programming education organization in Korea, "Likelion". I was chosen to compose a four people team and start from nothing. Throughout this experience I learned how to create a full-functioning website with user authentication and search module and how to communicate with administrators and rights owners. This project inspired me to one day create a meaningful service that efficiently and effectively impacts a community of users.

To accomplish the dream that I had which was to create a service that improves people's life, I started a project <u>SKKOOLBUS</u>, a bus tracking app for my university, Sungkyunkwan Univ. I had many challenges with this project, reforming a team twice, funding issue, convincing school employees for getting an access to the bus GPS api and mostly, technical issues. The goal was to provide not only the tracking but the real-time expected arrival time. There were some critical decisions that went into this project, such as determining if I should stick with a fixed-value for the arrival time but I made this app to calculate it real-time in the server. This experience of having a success overcoming many obstacles will aid me finish the graduate degree which will be demanding.

Outside of studying, I volunteered to teach programming to children from various socioeconomic backgrounds. I strongly believe that everyone should have a chance to experience programming regardless of where you come from or social status.

As a prospective graduate with economics major and informatics minor and a dual degree student, I am looking to utilize my practical skillset and knowledge base to pursue research in data science. My interests remain in regression issues and visualizing multi-variate data and I hope that may be the right steps to propel my future in data sciences and informatics at Johns Hopkins University.