Essay on Safeguard+

I used to glorify the ocean. It was one of the few things I found comforting because it felt so innate and its permanence transcendent to human life. The constant pattern of the waves reinforced my belief that nature moves in endless cycles, and that even after we cease to exist, the ocean will still be there. Through Zen Buddhism, I was taught to believe that everything would eventually dissolve into nothing and join the cycle of birth, death, and rebirth. The ocean reinforced my Buddhist belief in the inherent emptiness of anything humans ascribe value to. This philosophy defined my life and diminished my fear of death. Attachment to anything impermanent meant lacking enlightenment and liberation from the confines of the human mind.

On my thirteenth birthday, however, the ocean that embodied everything I was taught to believe mutated into a tsunami that killed thousands of people, including a close friend of mine. I tried to suppress my despair by embracing the belief that death was natural and that my pain was a petty distraction from enlightenment, but I could not alleviate my grief with Zen logic.

Other Buddhists around me seemed able to rationalize this enormous tragedy to the point of being resigned to it, deeming it part of the necessary course of life. For me, it had been easy to accept death in theory, but when I was confronted with it in reality, I realized I was afraid. This contradiction prevented me from being able to practice wholeheartedly and believe in Zen Buddhism for years.

I felt an incessant sense of urgency and anger, that this catastrophe did not have to happen. I could not understand how we had blinded ourselves to the possibility of the ocean as a potential danger to our lives. As a result, we had missed an opportunity to create a more efficient disaster protocol or a system to quickly guide citizens to safety. Finally, when I left for boarding school and my father demanded I download an application, "Life 360," so he could track me on GPS to make sure I was safe, I realized what I could do to limit the extent of such tragedies. Since location trackers and earthquake notification systems already existed as separate entities, I combined these technologies to create an application that would direct people away from a tsunami. I promptly reached out to academic institutions and, a year later, some computer science majors in Tokyo agreed to collaborate with me. After months of work, I finally released my application, Safeguard+, available in ten languages, this past summer. Anyone can download Safeguard+ through Apple's App Store to view nearby earthquake and tsunami statistics, one's current location, and the closest safe destination within the time remaining until a wave hits.

I resolved my internal contradiction by realizing that my Buddhist faith and my attachment to human constructs, including the value of human life, can coexist within my mind. Just because humans have ascribed value to something, it is no less real or important. Though Zen teachings deem human life impermanent and inconsequential, I believe they do not have to undermine its importance to me. Furthermore, to reject the importance of human life is to turn a blind eye to our own shortcomings, and thus to become passive recipients of avoidable circumstances.

Through my attachment to the value I've ascribed to human life, I learned to fight for it when it is threatened and exercise my influence by creating concrete solutions. I believe attachment isn't a lack of liberation because it inspires us to instate positive change and establish our agency even

over what we convince ourselves is unavoidable. By creating this app, I reconciled my Buddhist belief in the eventual oblivion of everything I hold dear with my newfound aspiration to defend these things for however long they, and I, exist.

Reflection on FUSE

This summer, I completed a 10-week Software Engineering internship at FUSE (previously known as Landslide), a startup and member of the university's Polsky Accelerator 2018 Summer Cohort. For some context, I am a third-year Computer Science major who first started programming in Autumn 2017 through the university's introductory sequence. Coming in to the internship, I was only familiar with Racket and C -- moreover, I had no previous experience coding such a large-scale project like app development. During the first 3 weeks, I taught myself JavaScript, React, React Native, HTML and CSS to familiarize myself with the languages essential to and commonly used in website and mobile applications. In the following 7 weeks, another programmer and I collaborated to design the user interface, program the app's front-end, assisted in planning the company's vision and ultimately our Demo Day pitch.

The first 3 weeks consisted of me spending a whole day learning a language -- getting acquainted with the syntax by reading documentation available online -- and then spending the following 2 days working on a project in said language, such as recreating a Twitter homepage in pure JavaScript or a simple Notes app using React Native. Upon completing these smaller projects, we group of programmers would get together and conduct a roundtable-style code review to dissect each other's code, sharing the logic we used to approach a problem or build particular functionality and noting which lines of code were good (i.e. efficient, logically flawless) and which lines could be improved. We continued to hold code reviews as we developed the FUSE app in the following weeks as well. These reviews were some of the most valuable experiences I acquired this summer, because through this exercise of constant feedback I was exposed to the various ways one can approach a coding problem, which enabled me to regularly refine the methods I employ when confronted with a bug, computational problem, or a complex project that requires a significant amount of organization beforehand. Prior to this internship, my focus was almost solely on getting code to compile since even that is often difficult enough -- whether the code was efficient, organized or could be written better was always a peripheral concern.

Working with other programmers on the same project though requires trust that everyone else's code works, and at the very least an expectation that each programmer is clear about what thought process underlies a piece of code. I have come out of this summer a programmer who values and recognizes the importance of planning and structuring a program beforehand as opposed to diving straight into the coding aspect, and will continue to keep this emphasis in mind as I continue to code for the rest of my major and beyond.

Through this internship I was able to work on a project rooted in a mission *and* solution that I believed in, which ultimately confirmed my desire to, in my career, work on a product that addresses an issue that is meaningful to me but also offers a solution that I believe in. Furthermore I realized my passion for materializing broad, macro-level ideas into technical

products and refining technicalities so they faithfully reflect said ideas. My internship with FUSE gave me extensive programming experience and valuable insight into what types of communication and technical skills are necessary when building a project with a group of other engineers. This understanding is translatable and necessary across all fields within the larger tech industry, and is an awareness that I now practice and bring to all types of programming work.