Final Reflections on My 2022 Summer Enrichment Experience at the Stanford University Summer Institute.

By Yoonseo Jung

I have officially finished my course at Stanford's Fundamentals of Augmented Reality summer institute. In three words, I would describe my experience as thrilling, intriguing, and rigorous. Throughout my second (and last) week of class, I learned about advanced techniques and new apps and got to experience some of the programs.

We started the week by creating our own filters, and this was my favorite part of the entire course. I never realized how the process actually worked until I worked on it myself, but to my surprise, it was definitely simpler than I thought. If you use creativity, you're 90% there! The program that we were taught to use was called "Spark AR." With this software, we were able to easily access templates and access libraries, which ultimately allowed an engaging AR experience.

We utilized an app called TouchDesign, which is a visual programming environment aimed at the creation of multimedia applications. There are many tools for what we call today "Creative Coding". The main idea is that programming should be accessible for artists and designers also without a formal programming education. There are different approaches to achieve this and one of the most popular ones is called "Visual Programming." Visual programming is a type of programming language that lets humans describe processes using graphics instead of text based metaphors, and it has opened the door to interactivity for many creatives that never got into text based coding.

We also used Shaders, a set of instructions that are executed all at once for every single pixel on the screen. That means the code you write has to behave differently depending on the position of the pixel on the screen. Like a type press, the program will work as a function that receives a position and returns a color, and when it's compiled, it will run extraordinarily fast.

The biggest part of this week was probably our final project. We had to create another prototype related to AR and assemble a presentation about our model. My classmates and I chose to create a prototype called “Guit-AR” (get it? Guitar but with AR). Since everyone in my group played some kind of instrument, we decided that a prototype related to music was quite appropriate. In summary, Guit-AR aimed to assist beginner guitar players in placing their fingers in the correct positions, as without the prototype, that could be quite challenging. This is especially helpful for self-learners.

The past two weeks have definitely been a challenge, but the all-nighters and countless cups of coffee were worth it if I think about what I gained from the course. I owe immense thanks to my instructor, Miguel, for his lectures and guidance, and ultimately, to the GFF for allowing me such a wonderful experience these past two weeks.

Thank you so much always for your wonderful support and guidance with whatever I do. I'm truly grateful to the GFF for everything.