**6.  Think about an academic subject that inspires you. Describe how you have furthered this interest inside and/or outside of the classroom. (350 words)**

“Chemical engineering works like a game”.

That is what Ms. Christine, a process engineer, told me in G10. I then imagined an avatar wearing a blue overall, steel-toed boots, and a hard hat in ‘The Sims’ virtual world.

Knowing I was day-dreaming, she called out to me and explained that ‘the problem solving steps’ are the ones similar to games: discovering flaws, understanding rules, doing trials, and achieving the best outcome. This reeled me into chemical engineering, so I asked her questions like “How do you do trial runs on huge processes?” and “How to ensure the best outcome?” She answered, but I didn’t completely understood: like my ‘The Sims’ house that’s missing the roof.

Ever since, whenever I played games – ‘The Sims’, ‘PUBG’, ‘Counter Strike’, etc. – I would allow chemical engineering permeate into my brain. As curiosity took over me, I started exploring.

I first ventured into “chemical”: I joined a chemistry summer program at Covenant College, where I learned scientific problem solving steps and spectrophotometry. It’s surprising how these steps are similar to my ‘stealth first, shoot last’ method in ‘Counter Strike’: Stealth, Define enemy, Observe location, Strategize, Test, Reassess and Reform strategy, Execute. Moreover, the program’s spectrophotometry experiments introduced me to biopolymers, propelling my DIY laboratory in my mom’s kitchen doing various DIY biopolymer experiment, which furthered my passion in Chemistry.

Next, I explored into “engineering” as I interned at a cosmetics company. Here, I learned the production process from chemicals to cosmetics via Aspen HYSYS: a chemical process simulation software. Finally, the missing roof to my virtual house is placed. I finally understood Ms. Christine’s analogy: the interactive GUI, its process units’ drag and drop feature, and the play/pause feature. It is INDEED like a game, except it requires engineering calculations basics like material balance.

My curiosity have now been quenched. I would do whatever it takes to understand chemical engineering deeper. Just like how I lose track of time playing games, now chemical engineering has made me lose track of time. Every method yields a different result carrying its own flaws. And from these flaws, new methods will be implemented until perfection is reached. Just like a game.