**Prompt 1**

**How do your interests directly connect with Cornell Engineering? If you have an intended major, what draws you to that department at Cornell Engineering?  If you are unsure what specific engineering field you would like to study, describe how your general interest in engineering most directly connects with Cornell Engineering. It may be helpful to concentrate on one or two things that you are most excited about. (250 words)**

Computers and I, we seem to have a similar predilection for straightforward, methodical, literal language. Through years of computer lessons, I’ve found joy and motivation through communicating with these marvelous machines. I’ve realized their limitless potential as efficient and indefatigable machines, their capabilities limited only by the skills of the programmer. This inspired me to study programming to nurture those computers into something capable of changing the world for the better.

To realize this, I believe that I would require not just an abundance of knowledge, but an opportunity to implement that knowledge into real-life projects within a positive community. I believe that Cornell Engineering would be the best place to do so. Not only does it offer prestigious courses taught by esteemed professors like Jon Kleinberg and Kavita Bala, Cornell Engineering also provides practical opportunities to collaborate on projects with peers and faculties. Participating in Cornell’s Big Red Hacks and being a part of the Cornell AppDev will help me attain a deeper understanding of computer language through working on various projects.

I also aspire to build my own technological start-up in the future, hence looking forward to participating in Cornell’s SENSE and 3 Day Startup program to hone my entrepreneurial skills and perhaps meet some future business partners along the way. Through these programs, I would get my start-up mentored by successful professors and entrepreneurs whilst exposing myself to great ideas of the other participants that might inspire my own.

Hi Samuel!

You’re going in the right direction here, but this draft does not yet answer the prompt to the depth that it is asking. The prompt makes it clear that you want to talk about your specific engineering interests and how they are specifically related to Cornell Engineering. Right now, you only talk about being passionate about programming and using it to “change the world” in vague, generic terms.

Considering the limited word count, I would make the first paragraph much more straightforward and in depth. What areas of programming are you interested in? What are your specific career goals in this area?

Then, in the second paragraph, you want to elaborate on the courses and programs you mention and tell us how they will help you achieve the goals you’ve previously mentioned.

Once you’ve elaborated on these things, I have a feeling you’ll only have space for a short sentence on the entrepreneurial stuff (which is fine, since it’s not engineering-related). You want to make sure you conclude by telling us again how Cornell Engineering is the right place for you.

Good luck!

Chiara

**Prompt 2**

**Describe an engineering problem that impacts your local community. This could be your school, neighborhood, town, region, or a group you identify with. Describe one to three things you might do as an engineer to solve the problem. (250 words)**

Before the pandemic, my classmates and I did a social campaign teaching in public schools around Jakarta about the dangers of non-recyclable wastes. But during our campaign, we discovered an unrelated issue: the lack of educational facilities received by the public schools of Jakarta results in the inability to provide adequate practical education. The absence of laboratories and scientific equipment means that students are unable to perform experiments necessary for their education. After some digging, I found that the major cause for this is cost.

I recalled a scene from the movie Iron Man where Tony designs his first iron suit by projecting responsive holograms and  interacting with them just like a real object. This scene opened my eyes to the potential of virtual and augmented reality technologies to replace expensive tools. I dream of creating a software capable of simulating experiments within mixed reality where students can interact with the projected scientific equipment while following instructions from the software. Teachers can monitor their students’ work from a separate screen.

Instead of spending funds on expensive equipment and a laboratory, schools can instead prepare VR or AR glasses fitted with the simulation software to conduct the experiments, saving a lot of money. By conducting experiments through virtual simulations, this ensures the safety of the students. Furthermore, this solution is also safer for the environment since dangerous chemicals do not need to be used, and experiments do not produce harmful byproducts that may pollute the surroundings.

Hi again!

This is an interesting story, but it’s a little confusing to me as a reader. I don’t see the problem here to be an engineering one, and you don’t either. If the main problem is cost, then how will inventing a brand-new, expensive technology help solve it?

Have a think about whether this is the problem you want to go with for this essay. If it is, then think about alternative angles in which engineering can actually help. Like in my comment, perhaps it then becomes a challenge of creating cost-effective but sustainable VR/AR, or maybe durable technology so that they don’t break easily (a useful feature for something to be used by students!).