

Why College is Important to Me

Every summer, Gramps and I would take odds and ends from the shed to make the most sinister scarecrow of them all. He taught me to use a rusty, blunt hacksaw to trim a pink baseboard for the lips, and let me drill some holes for eyes. "Don't tell Grandma," he would remark. Some old coat hangers would be shaped into hands using pliers and shoved into notches of the wooden arms. We stood proudly by the fellow planted into the veggie patch as robins landed at its feet to peck at the zucchini plants.

Maybe our scarecrows weren't the most effective. But it got me comfortable using tools - and my hands - to build. Woodwork led to electronics and playing with circuit boards. I almost fell off my chair when I heard voices coming out of my radio for the first time - I had made that! Further tinkering in my basement and my school's woodshop has led to the creation of many robots, a trebuchet, and a radio telescope.

I don't want to just study the world. I want to improve the world. I wish to pursue aerospace engineering in college, particularly in its application to the space exploration and asteroid mining fields. These areas have the potential to fundamentally change our world while tackling problems such as resource depletion and carbon emissions on Earth. I come with great interest in astrophysics, having studied relationships between different wavelength emissions from active galactic nuclei and fit their spectral energy densities for school projects and science fairs. I also have an interest in economics, something vital for making access to space

sustainable, and understanding its relationship to the global markets. If history has taught us anything, new frontiers will result in developments beyond prediction, and I couldn't be more eager to enter the engineering world at such an exciting time - on the brink of discovery.

College will give me exposure to classes and professors that will help me improve these tinkering skills. I yearn to use the maker spaces and design laboratories of university to learn by building, playing around, failing, and eventually creating solutions to real world problems.

I am used to working and communicating clearly in complex technical environments. When volunteering at a gliderport, I collaborate to solve mechanical problems, such as burst tail wheels and incorrectly wired rudder pedals, in a dynamic team - something vital to solving any engineering problem. The engineering challenges of today and tomorrow cannot be solved with one discipline alone. For example, a solution can be brilliant, but it cannot make a positive impact if you cannot convince the government, investors, and the public of its value. I look forward to engaging with people in the college community, people from different majors and disciplines, in order to approach problems from various contexts and perspectives.