

In ten years I see myself as a climate engineer. I plan on working to help mitigate, and even reverse, the impacts of climate change. The aspects I am most interested in are the impacts of excess carbon in our atmosphere and oceans, and how to remove it. This can be done via methods like direct-air-capture, where carbon dioxide gas is taken out of the atmosphere using chemical precipitation and sequestered underground or sold as a commodity. Another aspect of climate engineering is solar geoengineering, where non-polluting particles are injected into the upper atmosphere, reflecting some solar radiation back into outer space and therefore lessening the warming potential of the atmosphere. Lower-tech solutions include reforestation and targeting planting, such as installing trees and shrubs next to roads and highways, which pulls carbon out of the air right where it is generated and also provides sight, sound, and physical barriers from roads. In cities, plant barriers can be placed between roads and bike paths or sidewalks, providing protection for cyclists and pedestrians (carbon-free sources of transportation!). Overall, the multitude of ideas and solutions in the burgeoning field of climate engineering is incredibly exciting, and my undergraduate education at Princeton the next four years will be crucial in preparing me to contribute and be successful in the field. Princeton has already provided generous financial aid, but this scholarship will help me meet my student contribution, allowing me to focus on studying and being present in the college experience.

I have worked hard in preparation to be successful through taking as many of the most advanced courses as I could in high school, and in earning straight A's in my whole life. I also

learned leadership skills as the Co-Founder and Co-President of Sustainable Future Club, in which we worked to bring more sustainability into the daily lives of students by connecting with the local non-profit Sustainable Future's (<https://www.sustainablefuture.org/>) online, gamified platform. Additionally, I have spent countless hours attempting to “engineer” change in my school district by creating a proposal for a Credential Program in Environment and Sustainability for my (now former) school district, found at (<https://educateforenvironment.wordpress.com/>). I will be sharing this, along with the results of a survey of teachers and a change.org petition (<http://chnng.it/Gn8jW2kv>) with over 350 signatures, with the district's new superintendent in July.

My passion for the environment came from my childhood. I grew up next to a beautiful, undeveloped wetlands where I played, walked my dogs, rode bikes and made friends for the first twelve years of my life. My love of the environment is what inspires my desire to be a climate engineer and make a positive difference in the world, and my hard work is what makes me confident I'll be able to do so.