

When I first decided I wanted to major in Computer Science, I knew I liked to solve problems. Computer Science provided the opportunity to solve practical issues, not just theoretical ones, and I was enamored with it. However, I knew from the start that it's such an expansive field, and there would be almost too many possible career choices for me. So, I examined my other passions, like telling a story and helping others, and I realized that there are many ways to combine those passions with Computer Science and do something that ticked all of my boxes. For my freshman summer Monroe research project, I wanted to figure out how a computer "learns," and how I could get a computer to play a text-based game of my own creation. Researching this rich field opened a whole new realm of possibility for me, and it also opened my eyes to one of the most pertinent problems in machine learning: training biases. There's no way a computer can be biased on its own, but since it's learning using data written by humans, who are all inherently biased in some way, it will learn to be biased. So, it's important that the programmers of these machine learning algorithms implement counter biases that help promote things like diversity, equity, and fairness. When I wrote my project proposal freshman year, I said that the first step in having a computer write a game or interactive story is to understand how one might play or interpret such a story. Now, with more advanced coding knowledge and a refocused interest in doing something that promotes societal good, I'm ready to take the next step and teach a computer how to write a story- a diverse and socially conscious story. Pursuing a deeper understanding of machine learning and neural networks isn't just something I'm doing for fun; machine learning is a blossoming subfield of computer science that many tech companies are using to improve their products. By researching it in the context of storytelling and social impact, I'm learning an incredibly valuable skill in a personal way that will keep me engaged throughout.