EssayEdge

College Supplemental Essay

When I was in middle school, I fell in love with a game called Magic Tower. When I came across an online community for the game, I learned that someone had made a "game template," with which anyone with no programming experience could design his or her own version of the game. It turned out that those who had a knack for solving those custom and oftentimes very difficult towers were national champions in math Olympiads. I quickly discovered that I could not. As I didn't know how to code at all, I learned from the existing code, which was written in the Ruby programming language. Finally, after days of trying to decipher error messages as a programming illiterate, I was able to make a plugin that enabled an achievement system in a Magic Tower game made using the template.

In my first computer science class in high school, I worked with my friend, Anthony, on my first project, which involved analyzing the similarities of texts to Good and Featured Wikipedia articles. Although the project did not work in the end, I was fascinated by the possibilities of a computer learning from large amounts of data. Later, I made a program that compared the weather in Albany, NY with that of Boston, MA. In the artificial intelligence class, my group decided to create a generic game playing AI that could theoretically play any game that fits a certain criteria. After a senior introduced me to high school algorithms competitions, I became quite drawn to it, even staying up until 3 AM one night in finals week trying to crack a hard problem. I trained for and participated in competitions that involved solving problems with algorithms like USACO (United States of America Computing Olympiad), TopCoder, and Codeforces.

In addition to solving interesting problems, I used my knowledge to impact the community around me. I helped make two remakes of the website for the Exeter Math Club Competition, making it easier for people to register and compete in the contest and automating some of the graders' jobs. I co-founded XXX , an educational hackathon for regional middle and high school students. They are paired with a mentor, who guides them through a project idea the team decides on. Students left the hackathon having experienced what building a project is like, realized that coding is a creative exercise and became more excited about computer science. A parent of a participant even emailed our principal praising the event after it ended. As a co-head of the school's Computing Club, I taught members interesting data structures and algorithms that are typically only learned in college and helped them prepare for local programming competitions, like one run by Fitchburg State University.

Both a place where I can conveniently express my ideas and one where I can extend my expertise to those around me. The feeling that I am positively impacting other people through my efforts continues to motivate me.