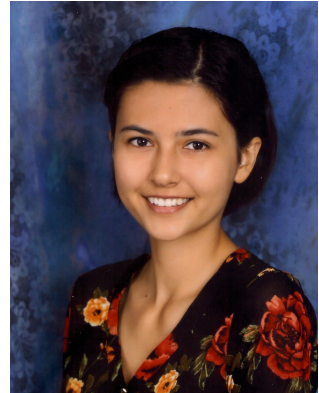


A Closer Look at Sydney Davison

In college, Sydney hopes to blend computer science with music and visual art. The following essay describes her high school experiences using technology to express herself artistically.



Artistic Engineer

Ever since I was a young child, I have had an inquisitive mind. I loved to play video games, but I always wondered how the games worked behind the scenes. I was particularly drawn to games like Roblox and Minecraft because they allowed the users to customize the game environment so that it behaved in new ways or looked differently. Because of this continued interest in how games work, I decided to take coding and engineering classes during high school. My favorite class was Intro to Engineering where we uploaded programming instructions to a circuit board that allowed music to play. This was a perfect opportunity for me to use my technical engineering skills, along with my artistic side and my passion for music. I am very involved in school bands, such as marching band, jazz ensemble, string ensemble, and drumline. Because of my deep understanding of music, I was able to help other students understand how the coded frequencies and tempo formed songs.

In addition to my passion for music, I also enjoy being creative with visual art. I love to paint as a hobby, and I am very interested in learning more about how technology can be used to create art through computer graphics, animation, and visual effects. In my coding class at school, we are learning how to use binary metadata to map colored pixels on a virtual canvas to create landscape images, such as the sun setting over the ocean. Rather than using paint and a brush, we use digital information to set the RGB (red, green, blue) color intensity at various points on the canvas, allowing us to blend colors and get the desired effect we are looking for. In college, I hope to explore more opportunities where I can use computer science to be creative with music and visual art.