Project Description: Self Playing Guitar

CPR E 394
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The goal of this project was to create a fully self-playing guitar. Completed during my Freshman year in an electrical engineering projects class, this project taught me about the importance of time management and having a plan. While the project was not fully completed (only the plucking hand was completed), I learned a lot of valuable skills that I have carried with me into my college career.

The project contained six servo motors that were hot-glued to a make shift PVC frame. The PVC frame would be mounted to the guitar so that the servo motors (which had guitar picks attached to them) would hand over the strings. By hooking the servo motors to an Arduino I was able to program them to move as requested.

This project taught be about the basics of servos and microcontrollers. As a freshman, it also allowed me to practice my C programing skills, which at the time were pretty undeveloped. These learned skills helped me to understand future classes and internships.

Due to the lack of an “upper-hand”, the guitar was unable to play any well-known songs or play any chords. However, it is something I hope to add in the future when I get the time to (perhaps during some downtime during a pandemic).