

Jaret Helminski

Senior Design Project Individual Contribution

My individual role on the “Smart Doggy Door” senior design project was I was the software design lead. In this project it meant that I was in charge of selecting the main MCU chip, the STM35L552 was the chip chosen. Along with this I oversaw the integration of all the subsystems in the design so that they work together and are coordinated correctly. In addition to being the main contributor to the code that the main MCU executed I was an extensive contributor in the implementation of the RFID reader and helped getting communication between the main MCU and the RFID reader chip up and running I also helped with debugging issues that popped up with the RFID reader. Finally, I helped with the debugging and teaching how the communications between the Wi-Fi chip and the main MCU worked. This included testing a variety of methods to used UART communication as well as helping other group members with how the IDE (STM32Cube) worked as I had worked with it previously and was more familiar. This concludes the summary of what I worked on for the senior design project “Smart Doggy Door”.