**Tesla**                                                                    **January 2021 – August 2021**
*Silicon Development Intern – Autopilot Hardware Group (Full-time)*                          *Palo Alto, CA*

- Completed working voltage sensor and SPI drivers despite a complicated bug in Tesla's SPI silicon
- Implemented and rigorously tested a software architecture designed to funnel temperature and voltage data over SPI
- Improved a python script to recursively parse generated protobuf, automated sending protobuf messages by filling a
- .JSON/.proto file, and synced this script as well as the hardware based on messages received over UART
- Created a python script able to generate QSPI images working around the LittleFS library, which used linux-like commands
- Gained experience writing firmware running ARM CMSIS RTOS wrapper for FreeRTOS, including drivers, interrupt handlers