# Event Experience

I did not know about the requirement to have designs on t-shirts. I rechecked the emails and did not see any mention of this. My impression was that we would dimply demonstrate the robot drawing on a piece of paper of some kind. I talked to several other students, and they also did not know about the t-shirt requirement. I would have chosen a smaller design if I had known this. I had to be very careful on where the robot started from, hold down the shirt very tightly, and be vigilant about the robot getting close to the edge of the shirt. But I managed to get through the event with success, and it was a good experience having to quickly adapt to an unexpected situation like that.

In my previous life, I worked a part-time job during high school and early undergraduate years as a cashier at a convenience store. That was an eye-opening experience dealing with the public and developing customer service skills. Today gave me some flashbacks to those days. A small number of the parents were rude and pushy, but I had to just smile, make eye contact, and continue to be polite – all while standing in the heat. For example, a few parents wanted custom designs for their kids and were surprisingly aggressive asking for them. I had to patiently explain that the robot only drew a pre-made design that I developed, and that making anything else would require several hours of design and testing. This was a small minority, however, and most were happy and thankful for the service.

# Observations with Robot

The battery life of the robot was very poor. Doing any sort of development and experimentation required having multiple sets of spare batteries to use while the provided ones charged.

My workaround to this issue was to add this line to the beginning of my program:

print("Battery voltage: " + str(getBattery()))

This way, I could monitor the battery life each time I reran my program.

The light sensor did not seem to work as expected. I repeated the experiments shown in the training videos, but the robot seemed to entirely ignore a flashlight that I shined on it.

As the professor told us while handing the robots out, the robot behaved in unexpected ways when the battery life got low. In my case, it would make movements shorter and slower, if at all. Also, it did not flash the red warning light like the documentation said.

Lastly, the Fluke Bluetooth to serial device that plugged in to the robot had issues if it ever became disconnected from the robot during operation. Simply plugging it back in would not restore operation. The Calico program would report “write error” whenever it tried to run a command. The only solution I could find was power cycling the robot and restarting the Calico program.