New Protocol Title: User-Centered Design of Control Schemes Using VR

This project seeks to discover patterns in the kinds of movements that users choose to use to teleoperate a virtual robot using a Virtual Reality (VR) interface.

During the study participants will:

- wear an Oculus Quest VR headset, in which they will observe the movement of a robot

- using hand-held Oculus Quest controllers, the participants will perform a control motion demonstrating the command that they would perform to achieve the motion they observe

- after a short training session, participants may be asked to control the robot to perform a task using natural gestures

- at the end of the study, participants will complete a short survey about their experience

Using the native hand-tracking features of the Oculus Quest VR headset, we will collect the users' motion data, pair it with the original robot motions, and analyze them to understand trends in the most common (and thus, hopefully, intuitive) control schemes that users invent.

The only data collected will be from the Oculus Quest VR headset. This includes how the controllers and head of the user was moving. No identifiable information (no audio, no video) will be collected. No personal data about the participants themselves will be recorded other than their email addresses, such that these participants can be compensated.

Participants will be recruited from the Georgia Tech Community as well as word-of-mouth advertising to members of the local community.