1. Have Sawyer copy a human’s motions.

Estimating human 3D kinematics from their 2D poses detected from OpenPose.

1. Make a Turtlebot follow people around

Assume grocery shopping scenario, working for people with disability. Help them carrying stuff and add additional features like audio guidance.

1. Consider your Turtlebot as a delivery robot. Create or identify an area of the room as the Delivery Zone. Plan a path to get to the Delivery Zone and execute. Working with Ember, find a way to artificially generate a camera problem (eg: introduce lag in the visual feed, cause a localization failure) and see if you can identify the problem and solve it. Overcome the problem and continue on your way to deliver your payload.
2. Consider your Turtlebot as a scout, on its way to learn the lay of the land. As it’s exploring, a fatal error in its camera feed occurs (eg: a connection has gotten loose and the Turtlebot can’t fix it itself). Deploy a secondary Turtlebot to find the scout Turtlebot, based on the information the scout has already collected and the last image it was able to capture.