**Initialize Robot**

Before turning the robot on, ensure the legs are approximately in their “zero” position of straight down. Once the robot is on, the legs can be moved to any other position.

Connect to the OrangePi via SSH using

ssh quadrupedrobotgroup@192.168.91.111

You need to be on the same network, then it should have a static IP of 192.168.91.111 and a password of opi. Should that not work, connect to the OrangePi with a monitor and keyboard (this is easiest to do with a USB-C dock), open a terminal, and run

sudo ifconfig -a

The last entry has the IP address of the OrangePi. Alternatively, only the “91” portion has ever seemed to change, so it is conceivably possible to write a script that would test all the options and return the new IP. Once connected, cd into the Downloads/WalkerFoundation/basewalk\_ws directory in at least two terminals. In the first, run ./setup\_all\_legs.sh to initialize all nodes. In the second, run ./calibrate\_all.sh to calibrate all actuators then send them to their sitting position.

**Controlling The Robot**

The bash scripts in the basewalk\_ws directory send ROS messages to the commander node, which then cause various actions. Running the setup\_all\_legs.sh in one terminal and calibrate\_all.sh in another is necessary to execute most of the other scripts. The scripts of most interest are the self-describing walk.sh, stand.sh, and sit.sh files, executed by running ./[filename].