Lecture 9

- High-fidelity point clouds
- Lidar sensor → running through MIT, grayscale camera
- Velodyne sensor
- Issues spinning on the drone → lidar
- Make different decisions based off sensor tradeoffs

Transform Library
- TF → rox library → gets the 3x3 coordinate axes
- Align IR sensor and camera!

ROS Bridge and Ros.js
- Rosnodes talk to each other
- Rosbridge is a Rosnode on the pi, it's a server (port 9090)
  So can connect to Ros outside Ros
- Ros.js is Javascript

ROS
- current standard
- mechanism for common robotics problems
- overly complicated
- dependencies are hard
- poor design decisions

Control Systems
Open loop vs Closed loop control
- High level → PID inside, end effector positions
  - respect to side
PID control
- Control theory on wikipedia