## **Ground Control Station** RC Controller ROS Script **ROS Topic** Arm/Disarm MAVLink Message (Radio Telemetry) Mode Switch Subscribe: State, Position, Attitude Desired Position/Velocity Publish: Arm/Disarm, Mode Switch, Desired Position/Velocity **Autopilot (Pixhawk)** Flight Management Barometer Desired Yaw Desired Position Outer-Loop Controller Position/Altitude Estimator Accelerometer Position, Velocity Desired Roll/Pitch Inner-Loop Controller Attitude Estimator Magnetometer Attitude, Angular Rate Desired Torque Desired Thrust Gyroscope Mixer Desired Motor Speed Actuator Interface PWM Command **ESC** Motor Voltage Brushless DC Motor