

## LET'S GO - Milestone 2

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Github Repository: <https://github.com/ericwu13/ee249-letsgo>

- I. **System** ([system.pdf](#))
- II. **Progress**
  - **Transmission Media**
    1. BLE communication succeed ([ble\\_svc\\_send\\_data](#))
    2. Mqtt server established (Amazon EC2 Instance IP: 54.90.30.207)
    3. [Publisher/Subscriber](#) established
  - **Robot Control Mechanism**
    1. Controller FSM ([controller.c controller.h](#))
    2. Can control robot via Bluetooth ([server\\_glove.py](#), [server\\_romi.py](#))
  - **Gesture Data Processing**
    1. Dynamic Time Warping ([dtw.py](#))
- III. **Modifications to Scope**
  1. Currently we stick with our plan to control the robot remotely.
- IV. **Identification of Major Risk**
  1. Latency of mqtt server to transmit commands - see the attached video in ppt, looks good
  2. Recognize the start of the gesture and end of the gesture - by the motion interrupt on our LSM9DS1 breakout (haven't done yet)
- V. **Scheduling of remaining time**
  1. ~~November 18: Discuss and finalize the entire framework and FSM (wayne), BLE (Sheng-Jung), mqtt server (Eric)~~
  2. **November 25: Preparation of the gesture library (Sheng-Jung), data preprocessing (Sheng-Jung), Implementation of the data collection (Eric), Gloves Assembly - flex sensor + imu sensor + buckler (Wayne)**
  3. December 2: Simple Demonstration
  4. December 9: Swarm Controlled (two robot react simultaneously)
  5. December 16: Final presentation and demo



The assembled glove should look like this. ([source](#))