

## Weekly report

### 1. My *Goals* from last week

- Improve running speed of simulation
- Complete Delaunay triangulation code
- Add Kalman filter

### 2. My *Accomplishments* this week

- Improve running speed of simulation
- Add Kalman filter

### 3. My *Goals* for next week

My old idea of localization is range based, on the other hand, it is based on odometry. But I found because of system error (sensor error), when the distance between underwater sensor and boat around 200, the mean position of estimation will not change any more. Thus, I try to use range free localization, which use directional transceiver to localize underwater sensor.

- Complete minimal spanning tree range free localization simulation code
- Test the accuracy of result.

### 4. What I need Dr. Becker to do:

- Add a folder on Github for update codes.
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