Supervisor meeting

Wednesday, 19th of April 2017

GPS Status

- We got the GPS base working and we walked on a line to test it. It follows ± 0.5 m.
- The GPS has some delays, around 3 seconds. Where the delay comes from we do not exactly know.
- If the data is at 5 Hz, the delay seems to be big. We think it is because we have done the forwarding in a quick way.
- We thought that the packages may arrive unordered, but the TCP orders the packages for you. Besides, different routes are unlikely because there are only few hops.
- 3G connection may give around hundred miliseconds delay.
- Maybe we should find a standard package that can forward information between a serial port and a TCP port.
- We get a better signal using the antenna in the C1 building.

USB Modem

- We do not have one right now.
- Jesper will look into it.

Path following

- The boat can more or less follow a square.

Robust Control Simulation

- The motors will not be able to do what they do in the simulations.
- We should look into why the control actions are like that.

Reading material

- How is the path generated. Explain it in the report.
- Functional requirements Storing the data is not the focus of our project. We could say that we store our sensor data for post-processing.
- Normally you verify the GPS by processing to find out what the actual position of the boat was. But we do not need to do it.
- We should show graphs of the results of the Kalman filter.
- The model for the magnetometer, we need to get either the model for the magnetic field of Aalborg or just project the components to get the direction.
- In Aalborg the magnetic field strength is $[16.5, 0.7, 47.7]^{\mathrm{T}}$. We should look into this.

Miscellaneous

- We should plan to sail now.

Next Supervisor Meeting

Wednesday, 26th of April at 13:00