

## Supervisor meeting

Monday, 7th of February 2016

### Sent Material

Corrective suggestions from the supervisors have been sent by email for later reference.

### Linearization

- See the comments about the bar notation in the received correction pdfs.
- Say that the  $\theta_F$  and its derivative are 0 as well as the angle  $\theta_w$ . Then the torque ends up being zero.
- About equation 3.19 to 3.21: Sum up what equations the model is made of and regroup the similar terms.
- About figure 3.4: clarify what we want to show with this diagram. The 'area' is more of an interval in which the linear approximation stays somewhat close to the real sine function.

### Verification of Model

- The idea behind figure 3.6 is to compare the linearized equations and block diagram. It is still a good idea to use this graph of comparison between model and equations in the report.
- It is also necessary to compare the original non-linear model with the linearized one.

### System Test (grouped data points)

- Try to do a (rolling) average of the potentiometer data.
- Show this process in the report.

### Miscellaneous

- Motor model → use a simple model, matching the behavior of the motor controller, at first and improve it later, once a working controller has been implemented.
- Sensors → same thing: stay with the potentiometer for the moment
- In later iterations, it might be possible to implement some filters for other sensor types.

### Next Supervisor Meeting

Monday, 14th of March at 13.00