

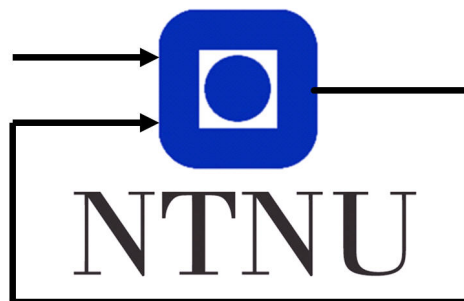
LaTeX Lab Report Template

Group 42

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Abstract

This report will highlight and discuss the results of the three graded assignments for the course TTK4250 Sensor Fusion. The code implemented was tested and tuned for both simulated and real datasets.

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1 Introduction

2 Graded Assignment 1

Theory

Implementation

Results

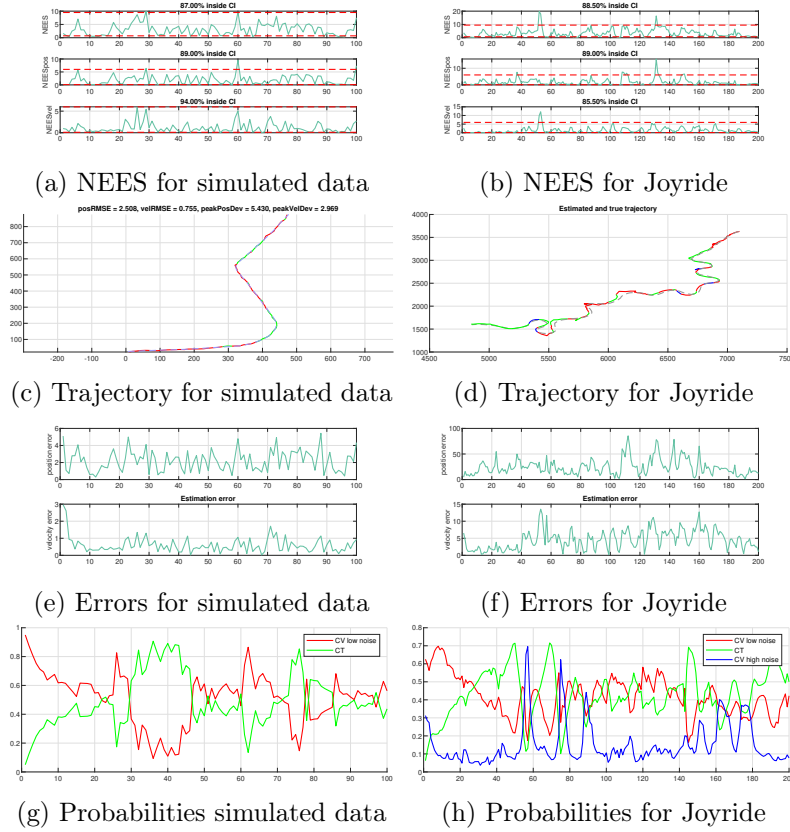


Figure 1: The same colour code was utilised for visualising the active modes in the trajectories as the probabilities. For the trajectories, ground truth is represented as a dashed line.

3 Graded Assignment 2

An error-state Kalman filter was implemented in MATLAB. For the relevant theory behind the implementation, see [2] and [1].

4 Graded Assignment 3

5 Conclusion

References

- [1] E. Brekke. *Fundamentals of Sensor Fusion*. 2019.
- [2] J. Solà. *Quaternion kinematics for the error-state KF*. <http://www.iri.upc.edu/people/jsola/JoanSola/objectes/notes/kinematics.pdf>. 2017.