LaTeX Lab Report Template
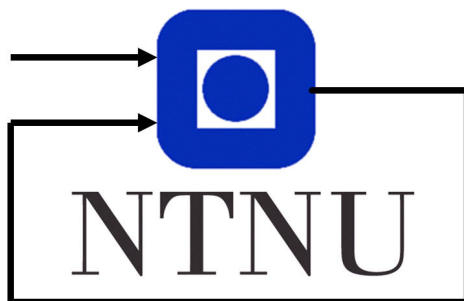
Group 42
Martin Albertsen Brandt
Martin Eek Gerhardsen

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Department of Engineering Cybernetics

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.

Contents

1 Introduction

2 Graded Assignment 1

(a) NEES for simulated data

(b) NEES for Joyride

(c) Trajectory for simulated data

(d) Trajectory for Joyride

(e) Errors for simulated data

(f) Errors for Joyride

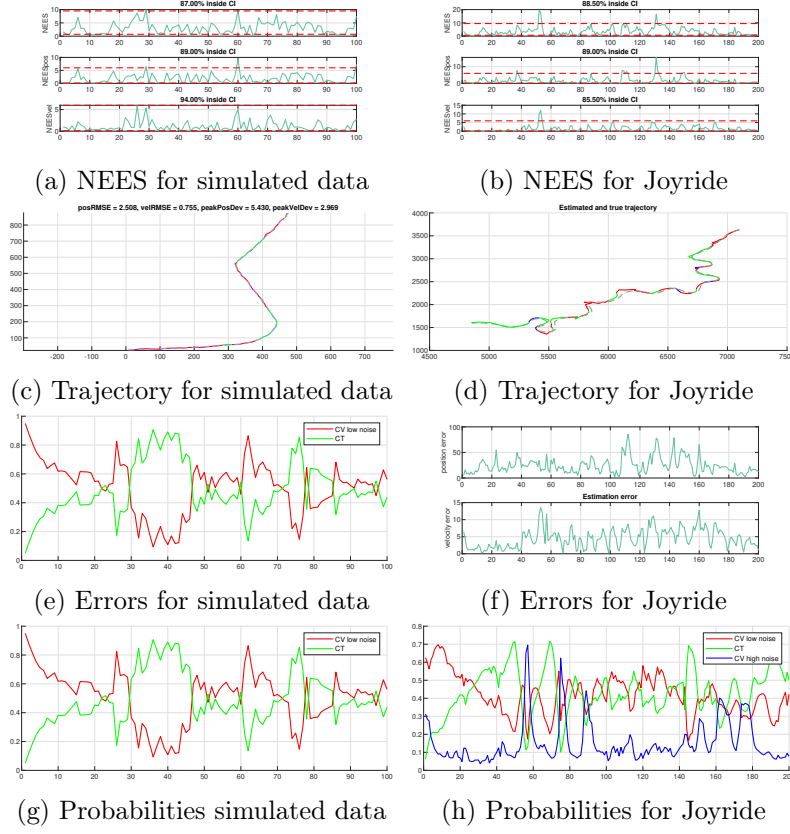(g) Probabilities simulated data

(h) Probabilities for Joyride

Figure 1: Red represents low noise CV, green represents CT, blue represents high noise CV

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.