

KTH MECHATRONICS ADVANCED COURSE

MF2063, HT 2018 FINAL REPORT

ESS-NW/ESS-CAR

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Abstract

Abstract starts here, what should be included:

The problem issue subject being addressed

How the problem is tackled

Overview of the results, and indication as to what level they solve the problem.

Implications of the results

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1 Introduction

This report presents the process and results of two projects "Embedded Service for Self-adaptive Network" (ESS-NW) and "Embedded Service for Self-adaptive Car" (ESS-CAR).

- 1.1 Background
- 1.1.1 Background subsection blabla
- 1.2 Project Description
- 1.2.1 Project Description sub blabla
- 1.3 Delimitations
- 1.4 Readers guide / Report disposition

2 Literature Review and State of the Art

3 Methodology

- 3.1 Engineering approaches ?
- 3.2 Tool-chains?
- 3.3 Project management

4 Implementation

4.1 System overview

maybe put communication diagram here

- 4.2 Communication between Beaglebones
- 4.3 Communication between Beaglebone and Arduino
- 4.4 Implementing the OS
- 4.5 Sensors
- 4.5.1 Ultrasonic sensor
- 4.5.2 Reflective object sensor
- 4.5.3 Camera
- 4.6 Controlling actuators
- 4.6.1 Steering servo
- 4.6.2 Motor ESC

5 Verification and Validation

6 Results

7 Discussion and Conclusion

8 Future Work