Århus University

Computer Technology

Project 1

Robot Design

Turtlebot3

Authors
Steffen T. Petersen — AU722120
Daniel Pihl — AU712814

Instructors
Jalil Boudjadar
Mirgita Frasheri

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Abstract

Define what have we done and talked about in the report.
Set up the general "question" for the report to answer.

Contents

Specifications

Boolean Algebra

What are the Specifications of the project, what was the purpose here?
What do we have to work with?
Details about our robot, and it's sensors system etc.

Karnaugh Maps

Karnaugh maps or K-maps, is a way to simplify boolean expressions which are too tedious for Boolean algebra. The reduction could be done with Boolean algebra. However, with the Karnaugh map it is faster and easier.

Process

In the following three subtasks we are to simplify the given expressions using boolean algebra.

a.

$$Y1 = A\bar{B} + A(\overline{B + C}) + B(\overline{B + C})$$

Applying DeMorgan Theorem we get:

Discussion

How did things go in this project?
Did we do what we wanted, is the robot working, did we learn anything?

Conclusion

Wrap up the abstraction, is it achieved, was the project a success? bla bla bla bla hej hej. 1234.