AUTONOMOUS MOBILE ROBOT NAVIGATION

USING THE IROBOT ROOMBA

Academic Year 2014-2015

Kevin DENIS

Alexander MEYNEN

Supervisor: Prof. dr. ir. Peter Slaets

Co-supervisor: Prof. dr. Luc Vandeurzen

Master Thesis submitted to obtain the degree of Master of Science in Engineering Technology: *Master of Industrial Sciences: Electromechanical Engineering*

© Copyright KU Leuven

Without written permission of the supervisor(s) and the author(s) it is forbidden to reproduce or adapt in any form or by any means any part of this publication. Requests for obtaining the right to reproduce or utilise parts of this publication should be addressed to KU Leuven, Technology Campus Groep T Leuven, Andreas Vesaliusstraat 13, B-3000 Leuven, +32 16 30 10 30 or via email fet.groept@kuleuven.be.

A written permission of the supervisor(s) is also required to use the methods, products, schematics and programs described in this work for industrial or commercial use, and for submitting this publication in scientific contests.

**Faculty of engineering technology**

CAMPUS GROuP T LEUVEN

Andreas Vesaliusstraat 13

3000 LEUVEN, Belgium

tel. + 32 16 30 10 30

fet.groupt @kuleuven.be

www.fet.kuleuven.be