



CERTIFICATE

Rimon Makram

successfully completed the

Robot Operating System (ROS) Summer School 2018

at the FH Aachen University of Applied Sciences, Germany

Topics covered: **Introduction to Mobile Robotics**
 ROS File System
 ROS Communication
 Hardware and Sensors
 TF and URDF
 Camera calibration and AR-Tag Detection
 GAZEBO Simulation
 Localization and Navigation
 Introduction to SLAM Algorithms
 Participation at Urban Challenge Competition
 Visit to Paris, France

Duration: August 20th – August 31th, 2018

Course credit: 5 ECTS credits

Prof. Stephan Kallweit

Patrick Wiesen, M.Sc.

Aachen, August 31th 2018