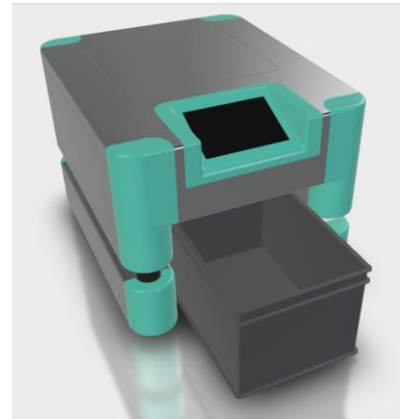


Software for Industrial Mobile Robot

In the Next Generation Navigation project, Saxion is developing a mobile robot based on open source software. The hardware of the robot is already designed and developed and the high level software is under development.

This assignment focuses on the software layer between the hardware and the high level software. The goal of the assignment is to design and implement a software infrastructure that will be deployed on the mobile robot. The software will be developed for an industrial PLC.



Task description

Create a modular design for the software based on the subcomponents of the mobile robot. Develop and test the software for the individual sensors and actuators on the robot. Implement the data communication between the hardware and the high level software using OPC-UA.

Practical Information

Student Profile: Applied Computer Science, Computer Science (HBO-ICT), Electronics, Mechatronics (with interest in software aspects of robotics)

Duration: September 2020 – February 2021

Compensation: 230 euro per month, before taxes

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