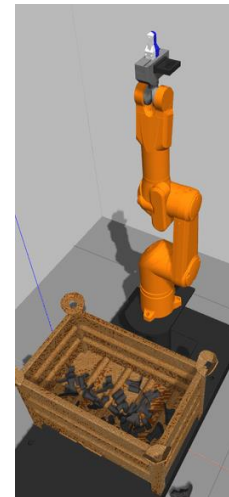


Graduation Assignment: Robot Simulation Software

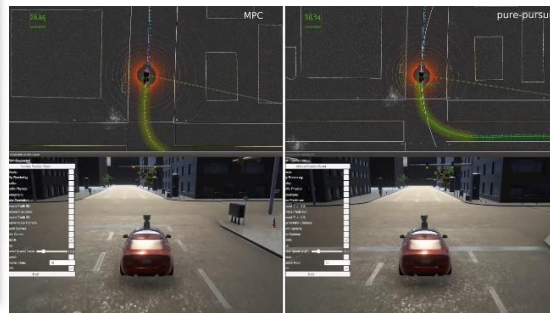
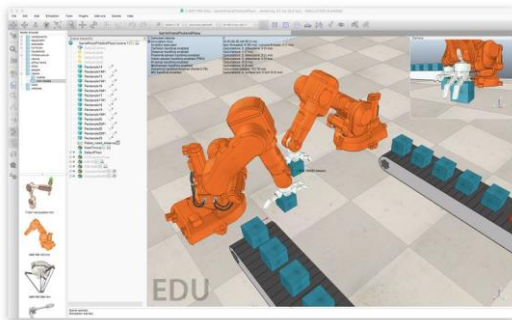
At the mechatronics research group at Saxion, we often used simulation software to develop and test our robots. Gazebo is the default simulation environment for ROS and ROS2. However, nowadays there are more simulators available. The goal of this assignment is to compare the simulators.



Task description

In this assignment, you start with an exploration of available simulation environments, such as Gazebo, Ignition, Unreal 3D, CoppeliaSim, LGSVL and 20Sim. You will perform desk research to perform a first analysis. Based on this analysis, you define a use case and evaluation criteria and implement and demonstrate the use case in several simulators.

In this assignment, it is important that you are open to experiment with different software packages.



Practical Information

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

Duration: February 2021 – July 2020

Compensation: 230 euro per month, before taxes

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