

Homework MATLAB

Introduction to Robotics and Intelligent Systems, Spring 2020

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Handed out 2020.03.13, due 2020.03.31 23:55:00

Please use the moodle system to upload your homework (moodle.jacobs-university.de). The system will shut down at the deadline and homeworks will **not** be accepted at a later time (submissions will be accepted until midnight). No other form of submission is allowed. Completing the homework will allow you to gain a bonus for the final exam.

Please upload 1 zip file, with two folders: one for the space ship, one for the robot. In each folder, please add a file where you describe what you have done. Use of L^AT_EX is recommended, though not compulsory.

1 Spaceship Exercise - 15 points

Complete the Spaceship Matlab code (10 points). Up to 5 extra points for:

1. changing the colour of some parts of the spaceship (1 point)
2. adding a new structure (2 points)
3. making the spaceship moving in a nice trajectory (2 points)

2 Robot - 10 points

Based on the SCARA robot code, define a new robot (it could be a different robot arm, or a mobile robot), with movements of the various joints, like in the SCARA code. Don't forget to describe the robot you are modelling in a separate document, to facilitate the understanding of your work.

Evaluation

Suspected cases of plagiarism will get **zero**. It will be up to the concerned students to demonstrate that they master the submitted code. If they fail, the case will be reported to the Academic Integrity Committee.