

Homework 5

[S21] Advanced Robotics

Robot – ABB IRB 360-3/1130 [Datasheet](#)

Tasks:

1. Matlab / Python code [1]
2. Implement inverse kinematics solution as function in matlab as $q = IK(T)$
3. Implement forward kinematics solution as function in matlab as $T = FK(q)$
4. Implement robot visualization
5. Create map of singularities

Report requirements:

- Robot model
- Equations for forward kinematic
- Equations for inverse kinematic
- Robot plots
- Analysis of obtained results
- Link to the project on <https://github.com/>

Submit only 1 report to moodle per group. Later submission policy -20% per week.

[1] Cheat penalty: 0 for Homework.