

Using AI technics like Deep Learning or Reinforcement Learning, a robot can learn by itself how to perform a task (like grasping an object). But it requires a LOT of tests and trials and takes a lot of time. The goal of this subject is to study different ideas to improve the training speed. For example, we can give the robot previous knowledge about physics like "it's better to grasp an object along its gravity center" or "grasp an object along its parallel sides". For this subject, you need a good Python programming skill and have the will to learn many different computer domains: AI, computer vision, robotics, ...