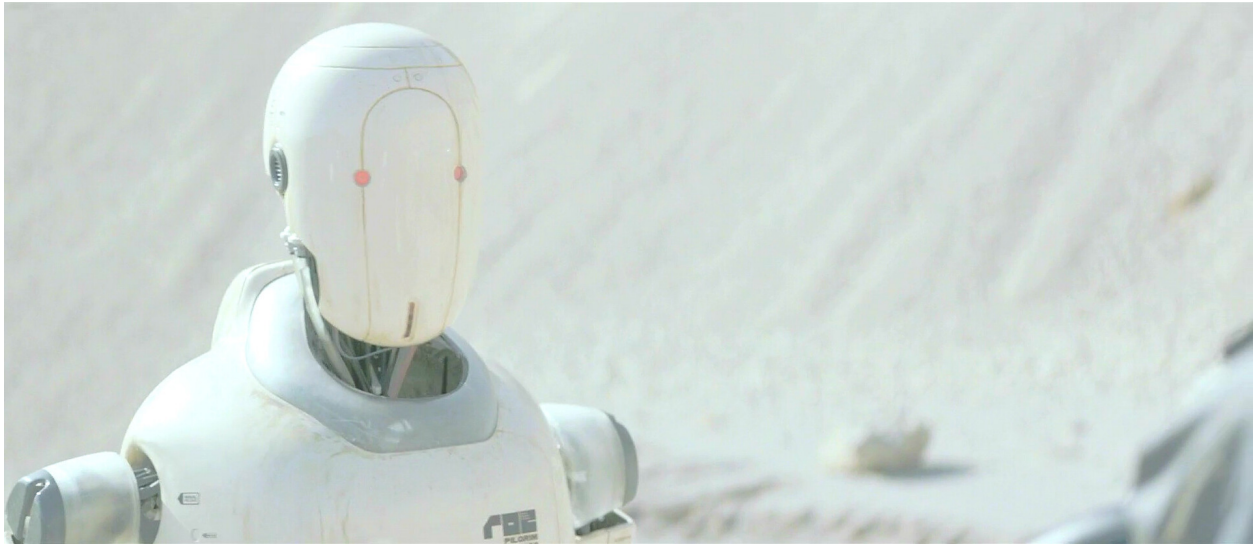




Polite Robot – Socially Aware Navigation



Social aware navigation is a subfield of robotics concerned with avoiding possible collisions of a robot with humans, animals, etc. In this project, we will try to take one step forward towards the coexistence of humans and robots. Specifically, first we will simulate a scenario in which the robot is at rest, and a person is walking towards it. The robot has to detect a possible collision and move appropriately, making a safe pass for the person. Several extensions will be then considered.

Prerequisites: Strong programming skills (preferably Python or C++). Background in (deep) reinforcement learning, computer vision, robotics is an advantage.

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Duration: 1 or 2 semesters