

Project Feedback

Assessment: Bench Inspection

Project: Student specified project on neural computation

Student: Minghong Xu (201601082)

Supervisor: Murat Uney

Grade : 79

Experimental Validation:

(for software/simulation projects only)

Quality of Presentation: 18

Quality of Poster: 19

Student Achievement: 22

Student Response to Questions: 20

Feedback to the student:

Comments and Feedback:

This was a student specified project on neural computations which focussed on deep re-inforcement learning (RL) and application on robotics problems, specifically, mapless navigation.

The student performed an in-depth literature survey, identified key approaches and implemented, from scratch, a RL library worth 4K source code, and an environment to simulate robotic scenarios. The library demonstrated policy learning in gait generation and navigation. More importantly, the student carried out this project independently. This is an excellent technical achievement.

The poster and the presentation were overall very good; some learnt policy examples would improve the poster and the presentation would benefit from highlighting the achievements instead of shortcomings of deep RL as a technique. The student has an excellent grasp of the material; more experience with the underpinning theory would help to balance the balance in responses to questions in terms of pros, cons and applicability of the techniques investigated throughout this project.