

CMP3103M/CMP9050M Autonomous Mobile Robotics, Assessment Item 1

| Learning Outcome | Criterion | Pass | 2:2 | 2:1 | 1st |
|---|--|---|---|---|---|
| [LO3] implement and empirically evaluate intelligent control strategies, by programming autonomous mobile robots to perform complex tasks in dynamic environments | Criterion 1: Group Robot Tasks (20%) Criterion 2: Individual Escape the Maze Task (in Simulation only, 50%), Implementation | You and your group have accomplished at least 40% of the 4 mini-tasks as defined in the workshop documentation. A working software component with basic functionality. Fair program structure and some code comments. The working implementation is demonstrated, and the implemented behaviour moves the robot in a meaningful way. | You and your group have accomplished at least 50% of the 4 mini-tasks as defined in the workshop documentation. A working software component with good functionality. Clear program structure and appropriate comments. The implementation is demonstrated successfully, making successful attempts to solve the task. | You and your group have accomplished at least 60% of the 4 mini-tasks as defined in the workshop documentation. A good implementation with some extra functionality or originality. The program code is well structured and commented. Good demonstration of basic and additional features, making progress towards the goal with a very good performance. | You and your group have accomplished at least 70% of the 4 mini-tasks as defined in the workshop documentation. An excellent implementation featuring original functionality and elements beyond the original specification. The program code is efficient, well-structured and commented. The solution is demonstrated very well, highlighting the additional functionalities, accomplishing the significant progress towards the goals with an excellent |
| | Criterion 3: Individual Visual Search Task (in Simulation, 30%), Video | A basic video showing the performance of the implementation. | A good presentation in a video of the system design and performance, with reflections on its performance. | A very good video presentation of the system design and reflections on its performance, that should a detailed understanding of the problem and solution. | performance. An excellent video presentation of the system design and reflections on its performance, including evidence of thorough testing and evaluation of the important system features with conclusions drawn from it. |
| Weighting | The criteria for this assessment are weighted as indicated. | | | | |