UNIVERSITY OF LINCOLN

Lincoln School of Computer Science

Assessment Item Briefing Document

Title: CMP9767M – Robot Programming **Assessment Item 2 - REPORT**	**Indicative Weighting:** **40%**

Learning Outcomes:
On successful completion of this assessment item a student will have demonstrated competence in the following areas:

- LO1: critically appraise the theoretical capabilities of existing state-of-the-art robot system algorithms and components
- LO2: understand and critically appraise the requirements and limitations of robot algorithms and components
- LO4: critically evaluate and comprehensively report implementation concepts and research findings

Requirements

You will produce a report about your developed artefact in the form of an academic research paper. This paper shall be written in the official IEEE transaction style. MS Word and LaTeX templates are available for download from https://www.ieee.org/conferences/publishing/templates.html. We recommend you use OverLeaf and instantiate the LaTeX template from there: https://www.overleaf.com/latex/templates/ieee-journal-paper-template/jbbbdkztwxrd
In your report, you should cover

- The aim and specific objectives of your developed artefact, including some motivation as to why this artefact has some significance;
- Related work, referring to other researchers' works on a similar task, and discussing these in the direct context to your work;
- The concept of your system architecture and the choice of algorithms or components you made to develop your artefact. You should back your justification with academic references to make a clear argument for your design choices;
- The evaluation of the artefact using appropriate quantitative methodology. Your evaluation must be focused on your chosen *focus area*, i.e. either *perception*, *navigation* or *coordination*. You must adopt suitable evaluation metrics and methodologies established in the field, reflecting the chosen focus area.

The report must not exceed 4 pages following the style guidelines, including all references. You are encouraged to include appropriate figures and plots in your work. You are advised to look at the style and structure of existing research publications.

Useful Information

This assessment is individually assessed. Your work must be presented according to the Lincoln School of Computer Science guidelines for the presentation of assessed written work.
Please make sure you have a clear understanding of the grading principles for this component as detailed in the accompanying Criterion Reference Grid.
If you are unsure about any aspect of this assessment component, please seek the advice of a member of the delivery team.

Submission Instructions

The deadline for submission of this work is included in the School Submission dates on Blackboard. You must submit your work as a single PDF file via the respective TurnItIn submission item on Blackboard. *DO NOT include this briefing document with your submission.*