University of Lincoln
School of Computer Science
PGT Criterion Reference Grid 2024-2025

CMP9794M Advanced Artificial Intelligence – Assessment Item 1 - 2024-2025

Learning Outcome	Criterion	Pass	Merit	Distinction
[LO1] Critically appraise a range of AI techniques for knowledge representation, reasoning and decision-making under uncertainty, identifying their strengths and weaknesses, and selecting appropriate methods to serve particular roles.	Probabilistic methods - software (50%)	The software partially solves (or with critical errors) the task of answering probabilistic queries using either Gaussian Processes or Bayes nets with discrete or continuous variables. The provided solution is based on publicly available libraries or module materials extended with only minor additions.	The software mostly solves (or with some but not so critical errors), the task of answering probabilistic queries using either Gaussian Processes or Bayes nets with discrete and/or continuous variables. The provided solution extends some of the materials provided by the module with own implementations.	The software correctly or elegantly solves, without significant errors, the task of answering probabilistic queries using Gaussian Processes and Bayes nets with discrete and/or continuous variables. The submitted software substantially extends materials provided as part of this module—beyond public libraries.
[LO2] Design and develop a software algorithm for solving complex AI problems in an application domain of interest.	Probabilistic methods - report (50%)	The report lacks a convincing justification of choices made on discrete/continuous Bayes nets or Gaussian Processes applied to the tasks of this assessment. Some results are reported but they are minimal, and their analysis are basic or shallow in their understanding.	The report provides a mostly convincing explanation regarding the choices made on discrete/continuous Bayes nets or Gaussian Processes applied to the tasks of this assessment. The results reported are beyond minimal, and their analysis show some reasonable and supported arguments.	The report clearly discusses, justifies and supports the choices made on discrete/continuous Bayes nets and Gaussian Processes applied to the tasks of this assessment. The results reported are comprehensive, and their analysis reflect compelling and well supported arguments.
	Video of solution (pass/fail)	Failure to submit a video will result in an overall mark of 0.		
Weighting is 50% of the module				