University of Lincoln
School of Computer Science
PGT Criterion Reference Grid 2023-2024

CMP9794M- 2324 Advanced Artificial Intelligence – Assessment1 2023-2024

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; [LO2] Design and develop a software algorithm for solving complex AI problems in an application domain of interest. LO2. Understand and analyse dynamic physical robotic systems	Bayesian Networks Software (weight=**25%**)	The software partially solves (or with critical errors) the task of answering probabilistic queries using Bayes nets with either 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 substantial but nor critical errors), the task of answering probabilistic queries using Bayes nets with discrete and/or continuous variables. The provided solution extends 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 Bayes nets with discrete and continuous variables. The submitted software substantially extends materials provided as part of this module—beyond public libraries.
	Bayesian Networks Report Content (weight=**25%**)	The report lacks a convincing justification of choices made on discrete/continuous Bayes nets applied to the tasks of this assessment.	The report provides a mostly convincing explanation regarding the choices made on discrete/continuous Bayes nets applied to the tasks of this assessment.	The report clearly discusses, justifies and supports the choices made on discrete and continuous Bayes nets applied to the tasks of this assessment.
	Gaussian Processes Software (weight=**25%**)	The software provided, based on publicly available libraries, implements Gaussian Processes (GPs) for classification using the provided datasets. The report lacks a convincing application of GPs for medical diagnosis.	The software provided (partially) implements Gaussian Processes (GPs) from scratch, but with substantial errors. The report describes a mostly convincing application of GPs for medical diagnosis using both datasets.	The software provided partially or fully implements Gaussian Processes (GPs) from scratch, without substantial errors. The report describes a convincing application of GPs for medical diagnosis using both datasets provided.

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	Gaussian Processes Report Content (weight=**25%**)	The report lacks a convincing justification of choices made on Gaussian processes and their application to the tasks of this assessment.	The report provides a mostly convincing explanation and justification of the choices made on Gaussian processes and their application to the tasks of this assessment.	The report provides a very convincing explanation and justification of the choices made on Gaussian processes and their application to the tasks of this assessment.
	Video of AI solutions (pass or fail)	Failure to submit a video will result in an overall mark of 0.		