ISLA – GAIA | ACADEMIC YEAR 2024/2025

Course Designation	Course Unit	Curricular Year
Bachelor of Science in Computer Engineering	**Artificial intelligence**	3º

Teacher	Type of Work	
	Individual	**Group**
Jorge Duque		X

Objective of the work	The practical work intends that the student demonstrates bibliographic research skills and critical sense in the search for Artificial Intelligence solutions (Machine and Deep Learning) in a topic of interest (which may be linked to the theme of his course project), however it may have to be in a broader sense.
Job brief	A report should be prepared in the format of the *template* provided, in which the topic of interest, the existing applications of AI in that same topic (with a critical sense in the form of implementation, results obtained, advantages, disadvantages and limitations) and future implementations proposed implementing AI methods are presented. It will be interesting to explore which datasets were used, characterizing them by number and distribution of values, whenever supervised or unsupervised machine learning algorithms are used, such as Regression, Classification, Clustering, Association, in which all attributes must be described.
Structure of the work (if applicable)	A report in *template format*, to be included: • Description of the topic of interest, with its relevance and motivation. • Bibliographic research on the implementations of AI (Machine Learning) methods, critical sense in the enunciation of approaches with form of implementation, advantages, disadvantages and limitations. • Practical development of supervised or unsupervised Machine Learning algorithm according to the theme of the work. • Future work involving AI proposed on topic. • Bibliography and websites consulted. • Presentation in MS PowerPoint format.

	Designation of the criterion	Weighting (%)
Evaluation criteria	Topic description	15%
	Bibliographic research with a critical sense	20%
	Practical development	35%
	Future work proposal	10%
	Bibliography	5%
	Presentation	15%

Timing	The work must be delivered on the Moodle platform by **09/12/2024**. The indication of the theme must be made to the professor's email address (jorge.duque@islagaia.pt) by **October 20, 2024**. The presentations of the works carried out will be made on **16/12/2024**.