## COMP30027 Machine Learning, Semester 1 2023 Project 2 Report Marking Rubric

Method – 4 marks	Critical Analysis – 8 marks	Report Quality – 3 marks
<ul> <li>Insightful consideration of data representation, and its interaction with learner choice</li> <li>Hyper-parameters identified and contrasted where necessary</li> <li>Appropriate use of evaluation metrics</li> </ul>	<ul> <li>Argumentation is logical and incontrovertibly supported by evidence</li> <li>Demonstrates a high level of understanding of theoretical properties of methods</li> <li>Theoretical properties of methods are well-linked to practical observations</li> <li>Thorough results analysis and laudable error analysis</li> </ul>	<ul> <li>Report structure is logical and formal, in line with typical standards in academic writing</li> <li>Generally clear and easy-to-follow</li> <li>Ideas and arguments are cohesive, where the components of the report clearly indicate how they relate to the whole</li> <li>Adequately concise and meets word limits</li> </ul>
<ul> <li>80%-90%</li> <li>Data representation mostly ignored or abstracted</li> <li>Hyper-parameters identified but perhaps only weakly contrasted</li> <li>Appropriate use of evaluation metrics</li> </ul>	<ul> <li>80%-90%</li> <li>Argumentation is logical and thoroughly supported by evidence</li> <li>Demonstrates a moderate level of understanding of theoretical properties of methods</li> <li>Theoretical properties of methods are linked to practical observations</li> <li>Thorough results analysis, and fair attempt at error analysis</li> </ul>	<ul> <li>80%-90%</li> <li>Report structure is logical and formal, with small divergences from typical academic standards</li> <li>Generally clear, with small disruptions in flow</li> <li>Ideas and arguments are coherent, and generally the work fits together as a unit</li> <li>Adequately concise and meets word limits</li> </ul>
<ul> <li>70%</li> <li>Data representation ignored, but appropriate for chosen methods</li> <li>Hyper-parameters un-identified or not contrasted</li> <li>Evaluation is logical and formal, but not appropriate</li> </ul>	<ul> <li>70%</li> <li>Argumentation is logical, but evidence is lacking in some areas</li> <li>Demonstrates a moderate level of understanding of theoretical properties of methods, but extended analysis not always clear or successful</li> <li>Theoretical properties of methods are not clearly linked to practical observations</li> <li>Only minimal error analysis attempted</li> </ul>	<ul> <li>Report structure is logical, but possibly informal or out- of-line with academic standards</li> <li>Some unclear sections that do not detract from the overall work</li> <li>Ideas and arguments are mostly coherent, but do not come together in a unified way</li> <li>Violate word limits (too long or too short, with &gt; 10% difference from the upper or lower limit)</li> </ul>

50%-60%	50%-60%	50%-60%
• Data representation not appropriate for chosen	• Argumentation is illogical in places, and evidence is	Report structure is flawed
methods	inadequate or contradictory	• Some unclear sections which detract from the overall
Evaluation is illogical or informal	• Theoretical properties of methods are not discussed	work
• Methods are inadequate and prevent meaningful	<ul> <li>No signs of abstract thought and/or error analysis</li> </ul>	Ideas and arguments are notably incoherent
analysis		• Violate word limits (too long or too short, with > 10% difference from the upper or lower limit)
0-40%	0-40%	0-40%
Tasks are essentially incomplete or not attempted	<ul> <li>Argumentation is generally absent</li> </ul>	• Ideas and arguments are missing or impossible to
	Mostly data and evaluation results without corresponding analysis	follow
		Report has no structure
	• Theoretical properties of methods are not discussed	• Not a formal report, even at a stretch

## Notes:

For categories labelled (80%-90%) and (50%-60%), it is at the marker's discretion to determine how well the report meets the standards of an H1 or P respectively. An alternative interpretation: the higher of the two marks indicates that the submission was close to, but not meriting, the category above ((100%) and (70%) respectively).

For categories labelled (0-40%): unsatisfactory (N) grades depend on the number of factors in which the submission failed to meet the required standards. More details will be given in the brief comments from the marker.