Grading rubric for group project in Model-based Machine Learning (MBML)

Category	Score (S) = 3	S = 2	S = 1	S = 0	w	S	wS
Abstract	Clear, concise (200 words or less), accurate abstract of addressed problem, data, methods and results	Concise (200 words or less) but incomplete abstract of addressed problem, data, methods and results	Unclear, incomplete or too long (more than 200 words)	No abstract provided	5		
Background	Relevant background clearly and concisely summarised in own words; appropriate sources referenced correctly	Background reasonably summarised and mostly relevant; appropriate sources mostly referenced correctly	Insufficient or irrelevant but original background; or questionable sources referenced; or incorrect citations	No background section provided	5		
Data selection	New dataset (possibly gathered from multiple sources) with many variables and inherent layers justifying the application of advanced methods from model-based machine learning	Existing dataset with many variables and inherent layers justifying the application of advanced methods from model-based machine learning	Simple and low-dimensional existing dataset	Inadequate or insufficient details provided	10		
Data description	Accurate description of considered data; relevant information provided; adequate and accurate description of key variables in plots or tables	Mostly accurate description of data; relevant information provided; mostly adequate and accurate presentation of relevant key variables in plots or tables	Inaccurate description of data; some relevant information missing; data presentation with plots and tables inaccurate, inadequate or missing	Inadequate or insufficient	10		
Description of modelling approach	Modelling approach accurately and clearly described	Modelling approach mostly accurately described, with minor in inconsistencies or errors	Inadequate or incomplete description of modelling approach	Modelling approach not described.	15		
Data analysis and modelling	Data analysis performed correctly; methods correctly applied	Data analysis with few minor mistakes; mostly correct application of methods	Data analysis with many or substantial errors	Data analysis incorrect or missing or not properly documented	15		
Results	All relevant scientific concepts correctly applied; adequate interpretation of results	Most relevant scientific concepts correctly applied; mostly adequate interpretation of results	Limited application of relevant scientific concepts; inaccurate or incomplete interpretation of results	No application of relevant concepts; missing interpretation of results	10		
Conclusions	Everything learnt accurately and convincingly summarised	Everything learnt mostly accurately summarised with minor inconsistencies	Conclusions not supported by results	No conclusions included in report	5		

Writing	Correct grammar and syntax; clear and concise style	Correct grammar and syntax; unclear writing	Numerous mistakes in grammar and syntax	Almost unreadable	5		
Formatting and organisation	Neatly and professionally formatted; appropriate structure	Formatting mostly neat and professional with minor inconsistencies; acceptable structure with room for improvement	Inconsistent formatting; inappropriate structure	Careless and unsystematic; unorganised	5		
Code	Code well-organised, structured and commented, easy to read	Code mostly adequately organised, structured and commented, with minor inconsistencies	Code inadequately or incompletely organised, structured and commented; hard to read	Code with no apparent structure and organisation; no comments provided; substantial errors	10		
Peer feedback on milestone	Milestone report submitted and peer feedback provided			No milestone report submitted and no peer feedback provided	5		
SUM					100		
Total points for group project $= \frac{1}{4}\sum_i w_i S_i$ (minimum $= 0$; maximum $= 100$)							