APPM 4490/5490 Theoretical Machine Learning: Rubric for project. Spring 2022, Prof. Stephen Becker

Group Members:

High-level Component	Component	Percent of grade	High standard	Medium standard	Low standard	*Grade*
Valid/interesting project (25%), and point of project is clear	Clear non-trivial problem is formulated	10%	Problem is of suitable difficulty, and clearly defined	Problem a bit too easy or too hard, or ill-defined	Problem is very easy or very much too hard, and vaguely defined	
	Problem is well-motivated	10%	Problem is interesting, and the reasons why are clearly explained	Problem is interesting but this is not explained, or explanations are lacking	Problem is not interesting, or no explanation at all	
	Alternatives approaches are considered	5%	Several approaches are considered, and there is support behind the approach taken. Alternative approaches need not be exhaustively listed, but a few categories of alternative approaches should be described	A few but not enough alternatives are discussed, or, it is not clear why your approach was chosen	No discussion of alternatives	
Relate the project to a concept from class (25%). Your project must include a paragraph describing how it involves concepts learned in class.	Problem involves significant amount of theory or computing	15%	Problem requires synthesis of material learned in class, though not necessarily at the level of a professional journal paper	Problem requires a bit of material learned in class, but not that much	Problem is trivial or off-topic (you can always ask the instructor before hand if you are worried it is too off-topic)	
	Related to concept learned in class	10%	Clear paragraph on relation to concept	Some relationship to concept from class but not made clear	Doesn't related to a concept from class	
Insightful discussion (25%). You should discuss/analyze your results, and/or validate a conclusion. For a paper review, you should discuss the strengths and weaknesses of the paper. For a project that involves generating your own results, the quality of the actual work is included in this category.	Final result achieved, or obstacles discussed	15%	Problem is solved, or it is made clear why it was infeasible to solve it	Problem is partly solved, but no discussion of why it wasn't fully solved	Problem not solved at all, and no discussion of what the fundamental difficulty was	
	Generates valid conclusions	10%	Report or presentation makes concluding remarks that are useful for the reader/listener	No interesting final comments, other than a summary of work completed. No analysis	No conclusion	
Professional communication (25%) of the written document and the oral presentation (and the slides). Well-organized and precise communication, grammatically correct writing, nicely format- ted documents and figures. Figures should be labeled appropriately.	Communication (report and possibly presentation)	25%	Well-organized and clear, logic easy to follow. Words are precise, jargon is appropritae. Figures presented as necessary. Grammatically correct	Follows high standard most of the time	Lacks organization; reader/listener has to make considerable effort to understand flow of ideas. Helpful figures may be missing. Grammar/spelling bad enough to make it difficult for the reader to interpret in places	
TOTAL		100%			*sub-total*	
ADJUSTMENTS	Not attending class when during presentation days: -10%. Not ready to present when it's your turn: -10%				*total*	