## CSCI 5525 – Advanced Machine Learning (Fall 2023) Project Progress Peer Review Rubric

Please use the following rubric as you do your peer review. For the progress report, please provide at least 6 pieces of feedback. The feedback must be from each of the following 6 main areas below. For each piece of feedback, provide the corresponding symbol and two or more lines of text describing your feedback (this can be in the form of a question, suggestion, or pointing out what was missing). For the symbol, replace the "X" with the column number corresponding to your feedback. For example, "P-2", "D-0", "A-1", "R-2", etc. (See additional examples below.)

Main Area	Symbol	0	1	2
Problem description	P-X	No problem described	Problem described but not in an understandable way	Clear description of problem
Data used	D-X	No data mentioned	Data mentioned but not described in detail	Data described in detail
Algorithms implemented or data exploration	A-X	No algorithms (data) mentioned	Algorithms (data) mentioned but not described in detail	Algorithms (data) described in detail
Initial results	R-X	No initial results	Some initial results but they are limited and/or not discussed	Significant initial results and discussion
Challenges faced	C-X	No challenges mentioned	Some challenges mentioned but not described in detail	Challenges described in detail
Next steps	NS-X	No next steps mentioned	Some next steps mentioned but superficial and/or unclear	Detailed and reasonable next steps mentioned

In addition to providing 6 pieces of feedback using the table above, please provide at least 3 things you would like to see the student include in their final report that is missing in the progress report. This can be anything from the algorithms to use, to the type of data, to digging into an area more, or answering a specific question. Describe each with three or more lines of text (9+ lines in total).

Please provide feedback that you think is useful to the student. Simple saying they did a good/bad job in all areas is not sufficient. We will grade based on the quality of the feedback.

## **Examples:**

- 1. If results for SVM with linear kernel are shown but not discussed, write "R-1" by the corresponding paragraph (or mention the paragraph number) with, for example, the text: "You used SVM with linear kernel and showed the error rates but did not discuss them. Why do you think the error rates are low? Have you considered using a Gaussian kernel?"
- 2. An example thing you would like to see added to the final report could be something like: "You used basic algorithms like logistic regression, SVM, and MLP for your image classification problem with poor results. We would like to see you use a CNN as they are designed for images and tend to have good performance. Also, consider cropping your images to focus on the item of interest and augmenting the images with random rotations, added noise, etc. to help avoid overfitting."