UDACITY

‹ Return to "Machine Learning Engineer Nanodegree" in the classroom

DISCUSS ON STUDENT HUB

Capstone Proposal

REVIEW

HISTORY

Meets Specifications

Dear student

Great work on your proposal! I think that you're meeting the specifications and it's clear that you have a pretty good idea of what you want to do. Your suggestions are all feasible and I think you're on the right track.

About the capstone project:
While the code and implementation are both important, keep in mind that the capstone report is the most important element of your final project. This report simulates a formal submission to a journal for peer-review. Publishing your results is a key credential in machine learning and we want you to be ready for this!

You should have very little trouble quickly passing the project review if you initially follow the report template. Keep in mind that reviewers will be looking to see that you not only fully document how you implemented your project, but why you made the choices you made. This type of critical thinking is crucial to publishing in a peer-reviewed journal. Based on your proposal, I don't think you'll have much trouble with this, but I wanted to mention it up front.

I think you're definitely on solid ground and you've picked an interesting topic for your project. I'm looking forward to seeing the final result!

Cheers!

Project Proposal

Student briefly details background information of the domain from which the project is proposed. Historical information relevant to the project should be included. It should be clear how or why a

problem in the domain can or should be solved. Related academic research should be appropriately cited. A discussion of the student's personal motivation for investigating a particular problem in the domain is encouraged but not required.

Great job giving the reader an introduction to the problem domain!

Suggested:

- If you include a link to your data source in this section, you can directly lift it into the 'Project Overview' section of your capstone report (to save a bit of time).

Student clearly describes the problem that is to be solved. The problem is well defined and has at least one relevant potential solution. Additionally, the problem is quantifiable, measurable, and replicable.

Nice job here! This is a great description of your problem and how it is structured.

The dataset(s) and/or input(s) to be used in the project are thoroughly described. Information such as how the dataset or input is (was) obtained, and the characteristics of the dataset or input, should be included. It should be clear how the dataset(s) or input(s) will be used in the project and whether their use is appropriate given the context of the problem.

Excellent job noting how the classes in the dataset are balanced! I won't hold you up on it, but be sure to note how the images are formatted when you write up the `Data Exploration` section of your report (dimensions, number of layers etc.).

Student clearly describes a solution to the problem. The solution is applicable to the project domain and appropriate for the dataset(s) or input(s) given. Additionally, the solution is quantifiable, measurable, and replicable.

Nice high-level summary of your proposed solution! I think any of these models that you're considering should be feasible solutions to the problem.

A benchmark model is provided that relates to the domain, problem statement, and intended solution. Ideally, the student's benchmark model provides context for existing methods or known information in the domain and problem given, which can then be objectively compared to the student's solution. The benchmark model is clearly defined and measurable.

Great job picking a relevant result from the literature! I won't hold you up on it, but one thing you'll need to do when you write up your report is to pick a *specific* result from this paper as the benchmark (any of the results in tables 2 or 3 should be fine). For instance, since the benchmark is simply a baseline that you're trying to beat with your solution, it might be optimal to use the Xception model (from the paper) as your benchmark (as this is probably not going to be overly challenging to beat).

Student proposes at least one evaluation metric that can be used to quantify the performance of both the benchmark model and the solution model presented. The evaluation metric(s) proposed are appropriate given the context of the data, the problem statement, and the intended solution.

Looks good! Since the dataset classes are balanced, all of these metrics should be fine.

Student summarizes a theoretical workflow for approaching a solution given the problem. Discussion is made as to what strategies may be employed, what analysis of the data might be required, or which algorithms will be considered. The workflow and discussion provided align with the qualities of the project. Small visualizations, pseudocode, or diagrams are encouraged but not required.

Great work! One thing that you might also want to consider exploring is data augmentation.

Proposal follows a well-organized structure and would be readily understood by its intended audience. Each section is written in a clear, concise and specific manner. Few grammatical and spelling mistakes are present. All resources used and referenced are properly cited.

The template format is followed and the proposal is well written.

DOWNLOAD PROJECT

RETURN TO PATH