UDACITY

‹ Back to Machine Learning Engineer Nanodegree

Capstone Proposal

REVIEW
CODE REVIEW
HISTORY

Meets Specifications

Keen Student,
Congratulations with this piece of work!
It was quite a pleasure reviewing this and it is was just so amazing that you made it this great in just a single shot. This is rarely seen for this project. `I must endorse your mastery of the concepts being tested here` ⭐
Due to this great work, we will be pleased to have you use a just a minute of your time to comment after you rate this review on the following questions:

Please write them down in the space for comments that comes up after you have rated the work

- How long did it take you to put up this brilliant piece of work?
- What major challenges did you encounter in this work and how did you overcome them?

`We generally receive feedback from students who are diligent in their work and we know you wouldn't let us down with this`
Thanks in advance! 🙏

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.

- Excellent job with the Domain Background.
- A great job was made in providing a thorough overview of the project.
- An Excellent job was done providing research links and also referencing other academic works 👍

Awesome idea! I honestly am developing a keen interest to this presentation. I think it is catchy :)

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.

The description of the problem that is to be solved is quantifiable, measurable, and replicable.

Great! The problem is clearly defined here.

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.

- A great presentation was made here. You made a thorough description of the dataset to use in the project. 🎉
  - You did a very great job to provide some statistics of the data.
  - A great description of the input data was provided.
    Great job! A clear description of the environment has been made.

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.

- A nice discussion was made here.
- It was excellent stating the machine learning algorithms to be involved in getting this problem solved. This is the heart of the matter as it links the theoretical part of this work to the practical implementation and understanding of the work.
- This part of the work will also tell how much knowledge you have acquired of machine learning techniques.

Magnificent! The discussion provided in the solution statement is very good.

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.

The proposed random forest implementation was chosen as the benchmark .

Suggestions and Comments

- The purpose of benchmarking is to ensure that the problem we are trying to solve can actually be solved by machine learning techniques.
- This can be done by referencing the work of someone who worked on the same dataset as yours with a similar desired outcome.
- Note that both the benchmark model and the model we are building should all run on the same dataset as this places both models on a common ground for comparison.
- If no existing benchmark model that ran on the same dataset can be found, you could run a simpler model that and the value obtained for its loss and accuracy(since these two are your metric here) could then be considered as the benchmark.

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.

- You are on the right track, the metric is clearly defined and a justification was provided.
- Good choice of RMSE.
- It would be good to clearly state the formula for the calculation of the RMSE

Pro Tips

The following posts will provide Some methods to evaluate the performance of a machine learning problem

- https://towardsdatascience.com/choosing-the-right-metric-for-evaluating-machine-learning-models-part-2-86d5649a5428
- https://towardsdatascience.com/choosing-the-right-metric-for-machine-learning-models-part-1-a99d7d7414e4

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.

A good strategy was conducted to approach the solution in the report.

Good job! Good summary and relevant discussions are presented.

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 report is clear, well organized, readable, and easy to understand. Adding references at the end was one major thing you did.
- Good writing skills are displayed here.

Wonderful job! Project was well presented

⤓ DOWNLOAD PROJECT

RETURN TO PATH