



[Return to "Machine Learning Engineer Nanodegree" in the classroom](#)

# Capstone Proposal

## REVIEW

## CODE REVIEW

## HISTORY

### Meets Specifications

Keen Student,

Congratulations on making it in this project proposal. This is quite a good piece of work you have done here. I must commend the hard work and determination perceived in this piece. ★

- The results of this proposal are well appreciated and we are proud of it. I urge that the spirit invested in this work never fades while learning with us here at Udacity. Happy learning! 🏆

### 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.

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.

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.
    - It was good stating that the dataset is unbalanced. 🎉
- Great job! A clear description of the environment has been made.

### Suggestions and Comments:

- You could provide a snapshot or visualization of the first few rows of the dataset to give the reader an idea of how the data is structured

Please check out the following posts for more information on how to analyze and describe your dataset

- <https://machinelearningmastery.com/quick-and-dirty-data-analysis-for-your-machine-learning-problem/>
- <https://www.r-bloggers.com/how-to-prepare-and-apply-machine-learning-to-your-dataset/>

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

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.

Good job! A suitable benchmark has been defined.

## Suggestions and Comments

Please check on the following links that provide more information on choosing a nice benchmark for a machine learning problem

- <http://www.stratio.com/blog/benchmarking-machine-learning-prediction-models/>
- <https://blog.dominodatalab.com/benchmarking-predictive-models/>

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 justification was provided.

## 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.

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.

Fabulous job! Well organized structure and great writing skills. It was a delight to read this.

RETURN TO PATH

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