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Capstone Proposal

REVIEW

HISTORY

Meets Specifications

Great job finishing up your proposal! With your final capstone report, just remember to follow the [report template](#) and fulfill each rubric point to quickly pass the final review.

Best of luck with the project! 😎

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.

Good work outlining the project and providing background information on the credit card fraud problem domain.

This is an interesting real world problem that can definitely be tackled with machine learning. 😊



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 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.



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.

If you haven't considered them already, [xgboost](#) and [LightGBM](#) are popular gradient boosting models that could be appropriate to use here as well.



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.

Make sure your final report identifies a specific [benchmark](#) level of performance based on an actual model or naive prediction.

e.g., try fitting a simple linear model to set a baseline score for the dataset. 😊



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.



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 discussion of your [approach to solving](#) the problem. I hope you find it challenging and rewarding as you complete the implementation. 😊



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.

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