UDACITY

PROJECT

Capstone Proposal

A part of the Machine Learning Engineer Nanodegree Program

PROJECT REVIEW

NOTES

SHARE YOUR ACCOMPLISHMENT!

Meets Specifications

This is a solid approach to an interesting and challenging problem with direct practical applications. Your proposal is well written and demonstrates your full understanding of the work required of you, so I have no major concerns. Have fun with this!

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.

- Solid introduction to the problem you're solving, with a good focus on the importance of the field of NLP, and what its goals are
- It's clear how machine learning is a viable solution in this situation, based on your discussion here

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 input and output are well defined, which makes for a solid problem statement

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.

- The source of the dataset, its size, and the features/information it contains are all recorded, giving a solid overview that justifies why it is suitable for the situation

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.

- This is definitely the right approach to the problem, using an RNN
- The choice between LSTM and GRU is interesting, and I'll refer to this SO answer in stating that I might prefer the GRU here
- Also, this is quite a different approach, but had you considered or heard of siamese networks? I don't really have any direct links to share on the topic, but if you Google around for the term "siamese networks" you may find an architecture that works well for a problem like this

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.

- Comparing to the results of another model is always the optimal way to obtain a baseline score, as this is objective and well defined, and based on your same problem and even same dataset. Good choice

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.

- The metric is well explained and mathematically defined in a clear way
- In your full capstone report, be sure to take the time to justify your choice here based on the characteristics of the problem. What makes this metric most suitable?

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.

- Solid step by step outline of the work to be done here; you've clearly demonstrated your full understanding of the machine learning process

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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Student FAQ