Machine Learning Engineering Career Track Capstone

Step 4: Project Proposal

Summary

Time Estimate: 2 - 4 hours

Once you've decided on your final capstone project idea, we'd like you to write a proposal. A project proposal is a short (1-2 page) document that answers the following questions:

1. What is the problem you want to solve? Why is it an interesting problem?
2. What data are you going to use to solve this problem? How will you acquire this data?
3. In brief, outline your approach to solving this problem. You might not know everything in advance, and this approach may change later. This might include information like:
   a. Is this a supervised or unsupervised problem?
   b. If supervised, is it a classification or regression problem?
   c. What are you trying to predict?
   d. What will you use as predictors?

     e.   Will you try a more "traditional" machine learning approach, a deep learning approach, or both?
4. What will be your final deliverable? Will it be an application deployed as a web service with an API or a more robust web/mobile app.
5. What computational resources would you need at a minimum to do this project? *You may not have a very clear sense now, but work with your mentor to come to an estimate. In real industry applications, you'll often be called upon to provide resource estimates at the beginning of a project.*
     a.   Processing power (CPU)
     b.   Memory
     c.   Specialized hardware such as GPUs

The proposal will be part of a GitHub repository for your project. All code and further documentation you write will be added to this repository.

Once your mentor has approved your proposal, please share the GitHub repository URL on the community and ask for feedback.

At this point, the project proposal will be considered approved and ready.

Project Submission Steps

1. Write your proposal in a Google Doc (1-2 pages) and submit the link via the "Submit" button. Make sure your mentor has the permissions to comment on the document.

2. Work with your mentor to incorporate any feedback into later drafts. You are welcome to submit your proposal as many times as needed.

3. Once your mentor has approved your proposal, convert the doc to a PDF file.

4. Create a GitHub repository for this project (if you haven't done so already).

5. Add the PDF to your GitHub repository for this project.

6. Share the proposal with your peer community for feedback.

Note: All code and further documentation you write will be added to this repository.

Your project submission of this step will be evaluated using this [rubric](#).