Capstone Check-In 1

Guidelines and Recommendations



Capstone Check-In - Part 1

What?

- Presenting three potential topics and problems
- Describing your:
 - Goals & criteria for success
 - Potential audience(s)
- IDEALLY, identifying 1-2 potential datasets/data sources

When?

Wednesday, April 29, after lunch

How?

Lightning Talks! A 3-5 minute presentation that covers 3 potential topics, including potential sources of data, goals, metrics and audience.

{Project Idea}

- Data will be collected from:
 - Source1
 - Source2
- My MVP is: a model and something Else.
- My stretch goals include:
 - Goal1
 - o Goal2
- My observations will be _____ and my target will be ____.

```
I will use __{what}__ data

to build a ___{type}_ model

that predicts _{target}_ values

in order to {value prop}.
```

Additional Notes

- Some potential roadblock
- Something I want to research more is ______.
- I'm not sure if I can even accomplish ______.
- If anyone has recommendations on how to find ______, please let me know!

EXAMPLE: Hit Streak Predictor

- Data will be collected from ESPN
 API and Some Stats Website
- My MVP is an daily scraper and the main classification model.
- My stretch goal is an automated pipeline that emails me every morning with the top 5 predictions for the day.
- My observations will be batters, representing a single matchup. My target will be binary, whether or not they got a hit that day.

I will use batter performance data to build a binary classification model that predicts whether or not a batter will get a hit in order to try and win the MLB "Beat the Streak" competition.

Additional Notes

- Data collection/wrangling will be an issue due to the abundance of data. Each
 observation will need to be a single day for the batter so I will need to reformat
 a lot of the information I will have.
- I need to research more expert analysis to see what the important features might be.
- My stretch goal will be difficult, I will need help on automating the process and running it each day at a specific time.
- If anyone has recommendations on how to send emails with python, please let me know!

EXAMPLE: Produce Image Classifier

- Data will be collected from the flickr API
- My MVP is a NN that beats baseline accuracy for broad produce categories.
- Stretch goal: a species specific model that is deployable on the phone.
- My observations will be single images and the target will be the fruit label.

I will use produce images to build a multi-class classification model that predicts produce type in order to improve a frustrating part of the checkout process..

Additional Notes

- Image data is "fun" to work with
- We haven't learned NN yet so you will have to be comfortable implementing topics on the fly.
- Image data is <u>heavy</u>.

Resources

- https://github.com/BrianLKane/capstone
- https://github.com/irinhwng/Image-Classification-of-Fruits-and-Vegetables
- https://gallery.generalassemb.ly/DSI?metro=
- https://toolbox.google.com/datasetsearch
- Places to Get Interesting Datasets (from the Resources repo)