Module 7

git, GitHub, and intro to the final project

Housekeeping Monday, March 6th, 2023

- No class next week, March 13th Spring Recess
- Quiz #2 during next lecture, March 20th
 - Practice problems will be posted this week
- This week's homework will be done with your final project groups
- Later this week: Google Cloud coupon codes will be emailed to everyone

Today's Agenda

- Presentation of the Final Project
- Guest Lecturer!!1!
 - Peter Sobot, Staff Machine Learning Engineer @ Spotify
 - Lecture: git & GitHub
 - Download the lecture notes (PDF) for the GitHub walk-thru
 - AMA (ask me anything) on Machine Learning, Audio Processing, and Audio ML at Spotify!

Final Project

Why are we doing this?

- Give you practice for Python, SQL, and the tools we've learned, like git, GitHub, and Bash.
- Prepare you for the kind of research needed in academia and in the industry.
- Give you experience in managing your own project, and collaborating with another person.
- Provide you with something to point to when applying for internships and job opportunities. Use this project on your resume!

Problem Overview

Yellow Cabs x Ubers x Weather

Using hired-ride trip data from Uber and NYC Yellow cab from January 2009 through June 2015, and joining with local historical weather data, you will be providing a single Jupyter notebook and SQL queries to answer particular questions by downloading and cleaning data, storing the data in a SQLite database, and providing visualizations.

Quick Details

Refer to the full project assignment for complete details & links

- Project will be done in pairs.
- Project is due EOD Sunday April 30th. No late submissions.
- Earn 5% extra credit for turning in a week early.
- Anticipate spending 2 3x more time compared to the weekly homework (we'll have a lighter homework load towards the end of the semester).
- A project template is available but is 100% optional to use.

Heads Up

- Very carefully read through the whole project description. There are a lot of details!
- Review the grading rubric as you're completing the project to make sure you've addressed everything.
- Most likely, you will spend most of your time on Part 1 of the project.
- Many parts of the project contain topics we will learn in future modules. Plan your time accordingly.