INTRODUCTION TO DATA SCIENCE

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Lecture #12 – 10/3/2019

CMSC320
Tuesdays & Thursdays
5:00pm – 6:15pm

COMPUTER SCIENCE
UNIVERSITY OF MARYLAND

FINAL TUTORIAL

In lieu of a final exam, you'll create a mini-tutorial that:

- Identifies a raw data source
- Processes and stores that data
- Performs exploratory data analysis & visualization
- Derives insight(s) using statistics and ML
- Communicates those insights as actionable text

Individual or group project – 25% of final grade!

Will be hosted publicly online (GitHub Pages) and will strengthen your portfolio.

FINAL TUTORIAL

Deliverable: URL of your own GitHub Pages site hosting an .ipynb/.html export of your final tutorial

- https://pages.github.com/ – make a GitHub account, too!
- https://github.com/blog/1995-github-jupyter-notebooks-3

The project itself:

- ~1500+ words of Markdown prose
- ~150+ lines of Python
- Should be viewable as a **static webpage** – that is, if I (or anyone else) opens the link up, everything should render and I shouldn't have to run any cells to generate output

FINAL TUTORIAL RUBRIC

Prem and I will grade on a scale of 1-10:

Motivation: Does the tutorial make the reader believe the topic is important (a) in general and (b) with respect to data science?

Understanding: After reading the tutorial, does the reader understand the topic?

Further resources: Does the tutorial "call out" to other resources that would help the reader understand basic concepts, deep dive, related work, etc?

Prose: Does the prose in the Markdown portion of the .ipynb add to the reader's understanding of the tutorial?

Code: Does the code help solidify understanding, is it well documented, and does it include helpful examples?

Subjective Evaluation: If somebody linked to this tutorial from Hacker News, would people actually read the whole thing?