⌄ Data Science Individual Project

Objective

Provide a data-driven solution to a problem that excites you using the tools discussed (or related to) in this course.

Datasets

The dataset must be different with your group project final topic.

Tasks

For your project, you should:

- Pick an issue/problem that excites you
- Create at least three questions in the topic/issue/problem to help your solve the problem
- Select or create datasets
- Familiarize yourself with that data, if necessary:
    - data munging
    - feature engineering
- Choose proper model/method
    - Train/Fit the model by the datasets
    - Potential Methods: Classification, Regression, ...
    - Potential Tools: SciKit, TensorFlow (tf), ...
- Analyze results
- Future work
- Reference

Deliverables

Deliverables for your project:

- Propose the topic, due at 11/2 at 11:59 pm
    - Submit the filled proposal template in BrightSpace
- Draft of report, due 11/23 (Sunday), at 11:59 pm

- Required: draft of introduction, datasets, methodology.
- Optional: draft of result, discussion

More details about submission will be released before the due

- Final report, due on Sunday of the last lecture week (12/7) at 11:59 pm

  - Github Repository
  - Report: introduction, datasets, methodology, results, discussion/suggestion, reference + codes

More details about the requirements of report will be release before the due

- Method

  - Published code, pictures and report to a repository with readme [reference](#)
  - if use private Github repo, must add 'pangwit' by the following steps in [link](#)

Rubric

Category	Explanation
Introduction	Why was the project undertaken? What was the research question, the tested hypothesis or the purpo
Selection of Data	What is the source of the dataset? Characteristics of data? Any munging, imputation, or feature engine
Methods	What materials/tools were used in answering the research question?
Results	What answer was found to the research question; what did the study find? Any visualizations?
Discussion	What might the answer imply and why does it matter? How does it fit in with what other researchers ha
Coding & Reference	Clear citation at end of the report. ipynb file with clear comments and datafile.

Rubric based on the IMRAD:https://en.wikipedia.org/wiki/IMRAD

Start coding or generate with AI.