## Data Science Project for Candidate Hires

## Tradeweb Market Data

June 9, 2021

## 1 Take Home Project Guidelines

- 1. This is an opportunity to showcase how you approach a project and share with the team.
- 2. Model accuracy is less important than how you approach and analyze the problem.
- 3. You have 5 days before expected submission to work on this project
  - Weekend days included.
  - Expected submission by 8pm EST on day 5.
  - For example, if project is assigned on a Thursday afternoon, expected delivery would be by 8pm Monday.
- 4. All project work to be self contained in a Jupyter notebook file.
- 5. Jupyter notebook file to be shared via publicly accessible Github repository.
- 6. Code progress should be checked in at least daily.
- 7. For given project problem we expect:
  - Descriptive statistics and illustrations of the data set.
  - Creativity in feature engineering
  - Developing a baseline model and developing improvements upon a baseline model
  - Exploration of a deep learning approach to the problem is a plus but not necessary.
  - Ability to illustrate results in an intuitive and informative way.
  - Importantly, no use of any pre-existing work on this project is to be used.
  - Analysis of model weakness with potential explanation.
- 8. A results file which provides target examples and respective predictions from model(s).
- 9. A link to the Github repository to be sent to Samantha.Longlade@tradeweb.com

## 2 Description of Project

- Project data located here.
- A description and goal of the project can be found in the Overview section.
- Use only the data in the Train.csv file for your project. You can split this further into train and test sets as needed.
- Good luck!