PROPOSAL

Team Members:

* Ryan Brock
* Frank Davis
* Quang Le

Project Scope:

* Project Goals and Objectives

Using ML models to specific stocks to illustrate the strengths and weaknesses of each model as it applies to different categories of stock (volitle, stable, indexed)

* Goal: Utilize (3) models ( Classification, Regression and Neuronet to compare volitle , stable and indexed stocks within the Tech Sector

Project Activities and Work Plan

Research Questions:

Which model works best with which stocks?

which model best predicts stocks with high volitility?

Which model best predicts stocks with low volitility?

which model best predicts indexed stocks?

Datasets:

* Pull Stock price data from yahoo finance into CSV
* Determine list of stocks to use
* price data for 2 years 2019-2021 (starting in June 2019 - June 2021

Volitle: **Virgin Galactic, Uber, Enphase**, **SQuare**

Stable: **Microsft**, **Oracle**, **Intel**, **IBM**

INDEX: NASDAQ 100 Technology Sector Index

SPDR® S&P Software & Services ETF (**optional)**

SPDR S&P 500 ETF (SPY) (**optional)**

Invesco QQQ ETF (QQQ) (**optional)**

Ark Genomic Revolution ETF (ARKG)  **(optional)**

Breakdown of Tasks:

(Build a model)

* Frank - Classification; random forest and logistic regression
* Ryan - NeurONet
* Quang - Linear REgression and LSTM Model
* Group effort – create repository with folders (create one remote repository and the each member clones)
* Test models