Paper Draft

Part I: Introduction and description of the project

Part II: Historical approaches to stock price prediction

- Algorithmic approaches
    - What methods do other people use
    - What is their accuracy
    - How any money can their agent earn?
- Benefits of using AI for stock price prediction

Part III: Methods

- Virtual Stock Environment
- Neural Networks design (Our approach to stock price prediction)
    - What layers do we use?
    - The structure of NN
    - Preprocessing methods
    - Description of dataset
    - Description of output information
- Q-Learning Design (Our approach to stock purchasing)
    - What strategies do we use?
    - Define rewards and state.

Part IV: Result

- Accuracy of our NN
- Performance matrices we use
- Performance of Agent (Q-learning & NN)

Part V: Utopian and a Dystopian

- Describe what you project would mean in the perfect world where it helps create a "Utopia" and a world where it creates a Dystopia.

Part VI: Discussion

- A summary of what we did and conclusion.
- What is not right in our project? What can we improve? Future work
- Ethical impacts of predicting the value of stocks
- Ethical impacts of stock decision making
    - Purely in mathematical thought without thinking in the view of humanity
    - May harm some people’s privacy when showing the data and result
- General ethical impacts of AI in the stock market
    - Unemployment
    - Social instability
    - Inequality of wealth distribution
    - Higher labor requirements and its negative impact.