

1. **Define the problem** : In this case, we are trying to evaluate the performance of ChatGPT-generated algorithmic trading strategies in financial markets ( more broadly speaking, we want to test how much chatGPT can replace Financial Engineering work, in terms of coming up with strategies and financial data processing or coding).
2. **Conduct a literature review**: ( currently we have found several publishings related to our topic and still searching and learning for more, none of those, except the last one, is currently directly connected to GPT, but we found those literatures are nice to read and research so that we can utilize them in our project.)
  1. **"Deep Learning for Financial Forecasting: A Survey"** by Zhang et al. This paper provides an overview of the recent advances in deep learning methods for financial forecasting, including applications in stock price prediction, portfolio optimization, and algorithmic trading.
  2. **"Machine Learning in Finance: A Review"** by Lhabitant et al. This paper provides a comprehensive review of machine learning methods in finance, including applications in asset pricing, risk management, and trading strategies.
  3. **"A Survey of High-Frequency Trading Strategies"** by Cartea and Jaimungal. This paper provides an overview of high-frequency trading strategies, including market-making, statistical arbitrage, and news-based trading.  
"Advances in Financial Machine Learning" by Marcos López de Prado. This book provides a comprehensive overview of machine learning techniques for financial applications, including feature engineering, cross-validation, and ensembling.
  4. **"Deep Reinforcement Learning in Finance"** by Zhang et al. This paper provides an overview of deep reinforcement learning methods for financial applications, including portfolio optimization and algorithmic trading.
  5. **"Natural Language Processing and Sentiment Analysis for Finance"** by García-Sánchez et al. This paper provides an overview of natural language processing and sentiment analysis techniques for financial applications, including stock price prediction and trading strategies based on news sentiment.
  6. **BloombergGPT: A Large Language Model for Finance** by Shijie Wu<sup>1,\*</sup>, Ozan I'rsoy<sup>1,\*</sup>, Steven Lu<sup>1,\*</sup>, Vadim Dabravolski<sup>1</sup>, Mark Dredze<sup>1,2</sup>, Sebastian Gehrmann<sup>1</sup>, Prabhanjan Kambadur<sup>1</sup>, David Rosenberg<sup>1</sup>, Gideon Mann<sup>1</sup> <sup>1</sup> Bloomberg, New York, NY USA, Computer Science, Johns Hopkins University, Baltimore, MD USA
3. **Collect and preprocess data**: We will need historical financial market data, such as stock prices, trading volumes, and other market indicators. We may also need to preprocess this data by cleaning and transforming it into a suitable format for analysis.
4. **Develop ChatGPT-generated algorithmic trading strategies**: Once we have preprocessed the data, we can start developing ChatGPT-generated algorithmic trading strategies. We can use ChatGPT to generate trading signals based on the historical data. We can then use these signals to develop trading strategies and evaluate their performance.
5. **Evaluate the performance of the trading strategies**: The next step is to evaluate the performance of the trading strategies that we(GPT) have developed.

6. **Draw conclusions and make recommendations:** Finally, based on our analysis, we can draw conclusions and make recommendations. We can discuss the strengths and weaknesses of the ChatGPT-generated algorithmic trading strategies and provide recommendations for future research.