## **Math456 Math Modeling Final Essay:**

The following article is from,

https://bookdown.org/ccolonescu/RPoE4/time-varying-volatility-and-arch-models.html

OR

## https://rpubs.com/cyobero/arch

Project-6: Please read the above article to know about how to use ARCH model to make a forecasting. You may download some data from yahoo finance,

- 1. Go to **Yahoo Finance** at https://finance.yahoo.com/
- 2. Enter a quote into the search field.
- 3. Select a quote in the search results to view it.
- 4. Click Historical **Data**.
- 5. Select a Time Period, **data** to Show, and Frequency.
- 6. Click Apply.
- 7. To use the **data** offline, click **Download Data**.

and follow the structure of the article to complete the project.

## **Instruction of the essay**

- 1. You can name your own article title
- 2. Structure of the essay, six parts, each part is worth 1 point. Total 6 points, if pass the final defense, then +4 points=10 points.
  - (1) Introduction
  - (2) Data description
  - (3) Analysis
  - (4) Model evaluation
    Prediction and model accuracy
  - (5) Conclusion
  - (6) Reference