TOPICS IN QUANTITATIVE FINANCE PROJECT PROPOSAL

What is the project about?

This project touches on a unique stock market behavior call High Bonus Shares. It turns out that the companies that send high bonus shares to investors in Chinese A-stock market tend to have abnormal return in the future.

Then the goal of the project for this class is to train the computer to select the companies in A-stock market that are very likely to send high bonus shares.

Where the data is from?

In this project, I will do the financial statement of the listed companies and use the financial ratios and other indicators like management repurchase indicators to train the computer.

The data is mainly from the web http://finance.sina.com.cn/stock/ and wind dataset.

How to use machine learning to do the project?

- 1. Do the preprocessing of the data.
- 2. Use the traditional financial ratios as the inputs.
- 3. Add the stock price and external indicators as the inputs.
- 4. Maybe do some clustering and define some new futures.
- 5. Try lots of the methods and vary parameters to improve the model.
- 6. Do some visualization.