

# Proposal

## Members

- Haruki Moriguchi : *haruki.moriguchi@mail.mcgill.ca*
- Edwin H. Ng (# 260732345) : *edwin.ng@mail.mcgill.ca*

## Topic Modeling based Sentiment Analysis on Social Media for Bitcoin Price Prediction

In recent years, Bitcoin has gained enormous popularity. After receiving many media coverages in 2017, the price went up drastically from USD 1,000 to USD 20,000, from which it has since gone down. In fact, this sudden increase in price is not surprising since behavioral economics states that there are correlation between the public sentiment and the market, in addition to news information. Fortunately, with the advent of social media, the information about public feelings has become abundant, where Twitter has received a lot of attention from researchers.

1. BRAINSTORMING
2. **Textual representation**
3. instead of the traditional N-grams
4. word2vec textual representation for twitter
5. LDA for finding topics in : news
6. Sentiment analysis on those
7. compare with the stock price