ECE Capstone program
Spring 2018
Project Abstract & Info

Please provide the following information to be shared with on capstone information exchange platform:

1. Project number: 25

2. Project title (as will appear on the poster): Cryptocurrency Forecaster Based on Social Media Sentiment

3. Team members: Kartik Patel, Deep Patel, Zhihao Guan, Zhiheng Zhu, Deeptanshu Murdeshwar
4. Adviser(s) name(s): Wade Trappe

5. Up to 5 keywords that will help to classify the project scope:
Cryptocurrency, Forecaster, Social Media, Investment, Portfolio

6. Project abstract (up to 250 words) to be shared with judges:

With the rise in popularity of cryptocurrencies over the past year, our group wanted to focus on this emerging area of technology. We believe in the adoption of cryptocurrencies and the significant positive disruption it may cause in many industries in the future. With many of the cryptocurrencies currently available being speculative, the cryptocurrency market is very much like the stock market with people investing in the ideas and potential of the teams behind each currency.

Unlike the stock market, the cryptocurrency market itself is very volatile with prices varying drastically over any given time frame. The current forecasting tools used in the stock market that have been adopted for the cryptocurrency market are not very accurate. These models put their primary focus on the historical market data, however we believe that the cryptocurrency market is heavily influenced by social media sentiment and that we can use this correlation to better improve these same models.

Social media has become a significant part of many people's lives, especially younger individuals. These same individuals are the primary investors in the cryptocurrency market as they are more likely to support new and radical technologies. We aim to build a base portfolio application that will attempt to forecast cryptocurrency market trends based on the wealth of social media data available. Data will be parsed from various social media feeds from which we will use our models to recognize the sentiment (positive or negative) of the text. This sentiment will be an added layer, in addition to the price, for an attempt to more accurately forecast market trends.