## Bitcoin Tracking, Analysis, and Prediction

Emily Olsen and Vincenzo Prezioso

## Keywords

Bitcoin – a popular form of cryptocurrency

Cryptocurrency – a form of digital currency bought and sold through crypto exchange stores online Grey Method – a non-statistical method of prediction for non-linear time series established in 1982 by Deng Neural Networks – artificial intelligence which is achieved through artificial neurons and is capable of learning

## **Abstract**

Bitcoin, founded in 2009, is currently the most popular form of cryptocurrency holding over 60% of the market. While some investors have found great luck with Bitcoin, many are still hesitant as cryptocurrency does not have the same established growth as the stock market. The purpose of this project is to identify patterns in the volatility of Bitcoin and use these patterns to predict potential growth or decline in the short and long term value of Bitcoin. We intend to use established pattern recognizing methods such as the Grey Method or Neural Networks within the Python coding language.