# Boost Your Trading Game with BTC Predictor: The Next Generation Predictive Financial Software

## Harness the power of deep learning and make smarter Bitcoin investments

Berkeley, California — Is it even possible for non-professional traders to consistently profit from the highly volatile Bitcoin market? This Fall, a group of UC Berkeley students partnered with AnChain.Al, a blockchain security company that specializes in Al-powered platforms, to create a product called BTC Predictor. BTC Predictor is a dashboard that features a real-time Bitcoin exchange rate predictor, day-trading signal gauge, and a Twitter sentiment chart that empowers day-traders to make more reliable investment decisions while minimizing their risks.

"Cryptocurrencies have historically been characterized by great volatility, making it a risky bet for most investors. BTC Predictor brings the power of data and predictive analytics into the equation, making the investment in digital assets less scary."

— Francesco Piccoli, AnChain.Al Product Manager



BTC Predictor Dashboard Demo

BTC Predictor is capable of predicting Bitcoin's exchange rate in the next minute to an accurate degree and in real time with little delay. As far as we know, there is no similar software that can make such predictions on a minutely cycle. The underlying model accounts for human irrationality by performing sentiment analysis on recent Twitter data and is also capable of reading multiple technical indicators at a time. This allows it to capture market trends that would be humanly impossible to analyze, thus making the tool ideal for investors of any experience level.

The Twitter tool examines tweets containing the word "bitcoin" that were posted on Twitter in the past minute. It then uses an AI technique known as sentiment analysis to analyze a tweet's polarity (how positive or negative the text is) and subjectivity (how factual or opinionated the text is). You no longer have to waste your time scouring through #bitcoin tweets to extract useful information, it's already done for you! You can simply observe the charts to know how people around the world feel about Bitcoin at this moment.

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The technical analysis tool takes the guesswork out of the Bitcoin trading process. It provides users with a real-time trading signal in the form of a gauge that ranges from strong sell to strong buy. The tool was created using 12 trading strategies: 10 EMA crossover strategies and 2 Ichimoku Cloud-based strategies. Each of these 12 strategies outputs a buy or sell signal, and the average trading signal is displayed on the dashboard. You can use the signal to support your day-trading decisions!

Ever since its release, Bitcoin has become one of the biggest players in the cryptocurrency market. Many people have attempted to predict Bitcoin exchange behavior, but it has proven to be a difficult task. One reason for this is Bitcoin's extreme volatility. As Figure 1 displays, Bitcoin's exchange rate fluctuates wildly in comparison to traditional financial assets such as gold and stock indices. Subsequently, it is difficult to model the exchange rate of Bitcoin using simple regression models, as they fail to capture such variance. Additionally, unlike the equity market where companies' performance metrics are the mainstay of investor confidence, market sentiment plays a major role in influencing the behavior of the cryptocurrency market. Analyzing this feature adds another layer of difficulty to the already complicated prediction problem.

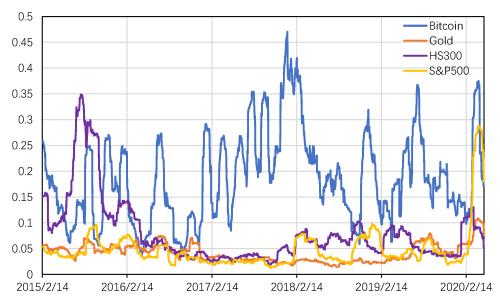


Figure 1: Historical Volatility of Bitcoin, Gold, HS300, and SP500 over 30 Days 1

While there are several well-known models that have attempted to make Bitcoin exchange rate predictions, many of them hinge on flawed comparisons and assumptions. BTC Predictor avoids such pitfalls by retraining the underlying model with new data every 5 - 10 minutes. As a result, the model can anticipate shocks to the market and its predictions will not degrade over time as it constantly learns emerging market trends and sentiments. This makes BTC Predictor a reliable tool to boost your trading game and make smarter investing decisions.

#### **About the Team**

The team consists of Chris De Leon (Computer Science), Michela Burns (Data Science), Vivian Lin (Data Science/Economics), and Haoliang Jiang (Data Science/Economics). Chris has past research and internship experience in Machine Learning and AI, and he was responsible for designing various aspects of the backend model. With previous projects and internships in machine learning and data analytics, Michela Burns worked on the project's web scraping and dashboard. Vivian has a background in economics and years of stock trading experience. This motivated her to implement the project's technical analysis tool and provide insights into the financial aspect of the project.

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### **Github Repository**

https://github.com/Bitcoin-Price-Prediction/btcpredictor

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#### References

1. Li, Y. (2020, July 16). Enhancing Bitcoin Price Fluctuation Prediction Using Attentive LSTM and Embedding Network. Retrieved from https://www.mdpi.com/2076-3417/10/14/4872/htm

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