# Crypto Surfers

# Riding the waves of the market

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#### **Crypto Surfers**

We use machine learning to pick the best technical indicators in order to build trade strategies that exit at the crest and enter in the trough.

The focus is on predicting the technical indicator signals which describes the behavior of the market

# **Customer Profile**

# DAYTRADING CRYPTO





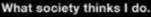


What my friends think I do.

What my mom thinks I do.

What I think I do.







What I really do.

Time spent analyzing charts

Panic trading

False signals

Fraud

Manipulation of the markets

Inconsistency

Confusion

#### **Process**

- 01 | API BinaceUS
- 02 | Cleaning the Data
- 03 | Finta Library for Technical Analysis
- 04 | Visualization
- 05 | Train and Test
- 06 | Evaluate the Output
- 07 | Predictions







# **Model Performance Evaluation**

Accuracy Score: 0.9428571428

Classification Report

		precision	recall	f1-score	support
	0.0	0.95	0.95	0.95	142
	1.0	0.93	0.93	0.93	103
accui	racy			0.94	245
macro	avg	0.94	0.94	0.94	245
weighted	avg	0.94	0.94	0.94	245

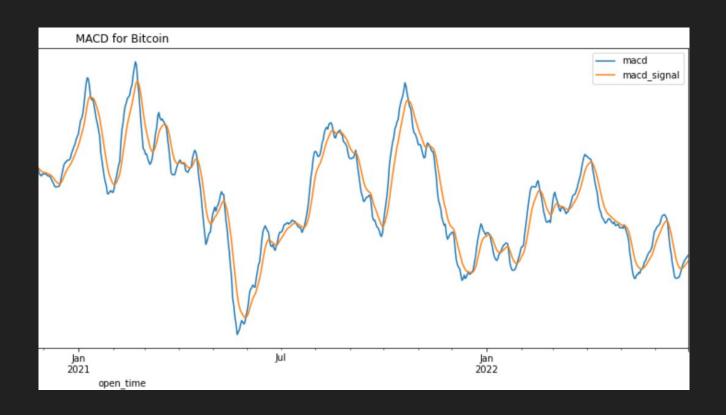
# **Technical Indicators Feature Importance**

Wave Trend Oscillator	(0.19236653373573173	wto_1
Commodity Channel Index	(0.16400925181915174	cci
Commodity Charmer muex	(0.09976914179615039	wto_2
Rate of Change	(0.09703509680838857	roc
Awesome Oscillator	(0.09571612728640447	ao
Relative Strength Index	(0.07251030555076506	rsi
Moving Average Convergence	(0.043543500930910396	macd
Moving Average Convergence	(0.035880294082826676	macd_signal
Divergence	(0.017123244894242724	obv
On-balance volume	(0.01705180929365827	VZO

#### Technical Indicators

#### Momentum

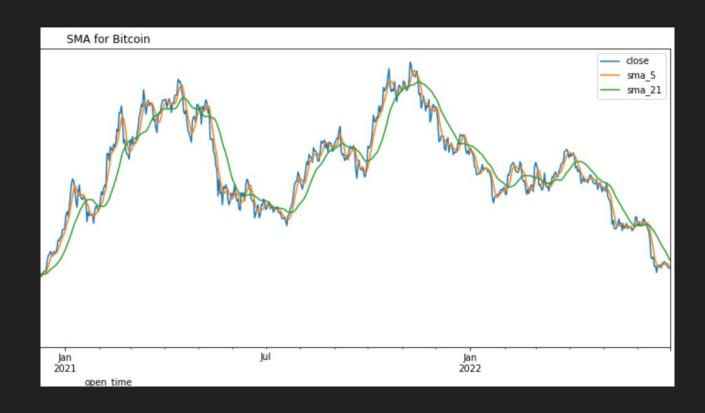
MACD



#### Technical Indicators

Trend

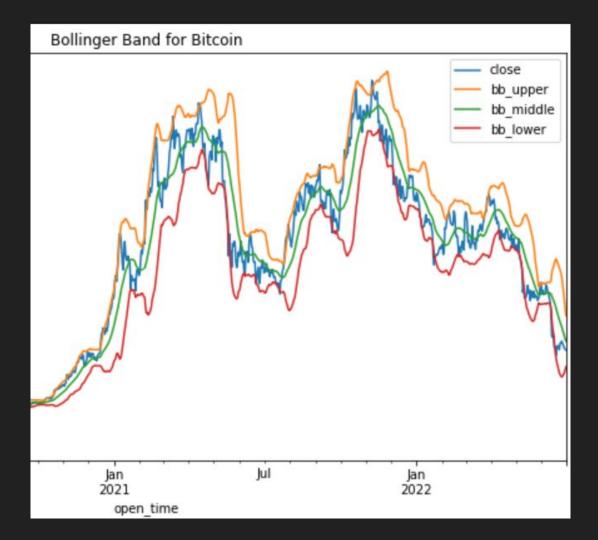
SMA



#### Technical Indicators

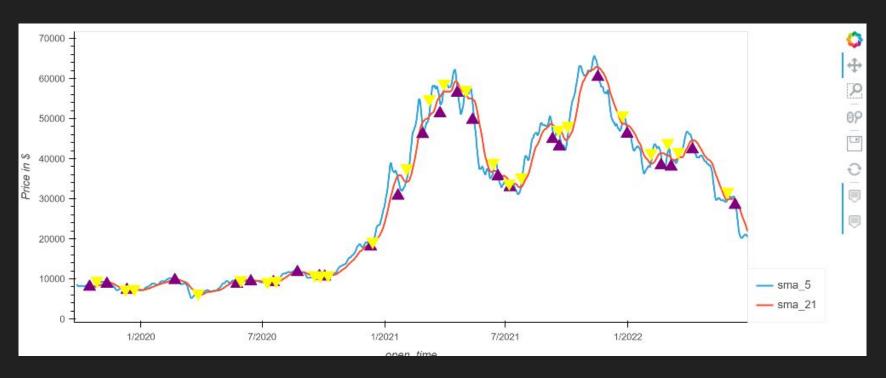
Volatility

BB



# **Creating Technical Indicators**

#### Plotting Buy Sale Signals



# Accomplished

- We found that the indicators that are similar to price action are more highly correlated.
- Indicators such as WTO, ROC, CCI, are better predictors of signals

### Lessons Learned

- Find a way to build a consolidated signal of all indicators
- Need to find the right Deep learning model to fit our needs

