ML Pipeline (sklearn, mongo, quandl, airflow)

Jeffery Scully

June 17, 2021

Contents

1	Trair	n LinearRegression Model	1	
2	Defin	Define Variables 2		
	2.1	DB table column - HL _{PCT}	2	
			2	
			2	
			2	
			2	
			2	
			2	
		Python Variable - X_{test}	2	
		Python Variable - y _{test}	2	
3	How	LinearRegression Works	2	
4	Save	Model, using Pickle	2	
5	Crea	te	2	
	Quan	dl api key - 6UfyTfL7MDo26ypfYzVd Include pydoc Include pi	ip	
$\operatorname{fr}\epsilon$	eze ou	tput Include try blocks		

1 Train LinearRegression Model

Using Quandl, an API that provides stock price data. The python libarary returns a pandas dataframe.

Getting Data for Google stock prices from DATE - DATE. Will train model using LinearRegression, and use it to predict future stock prices.

Data: Open: High: Low: Close: Volume: Ex-Dividend: Split Ratio: Adj. Open: Adj. High: Adj. Low: Adj. Close: Adj. Volume:

2 Define Variables

- 2.1 DB table column HL_{PCT}
- 2.2 DB table column PCT_{change}
 - This is the percent change of closing price verses the opening opening price

$$\label{eq:pct_change} PCT_change = Closing_Price - Opening_Price \\ \frac{}{Opening_Price \times 100}$$

- 2.3 Python Variable X
- 2.4 Python Variable X_{lately}
- 2.5 Python Variable y
- 2.6 Python Variable X_{train}
- 2.7 Python Variable y_{train}
- 2.8 Python Variable X_{test}
- 2.9 Python Variable y_{test}
- 3 How LinearRegression Works
- 4 Save Model, using Pickle
- 5 Create