Growth of Mining Stocks:

"Where Do I Invest My Money?"

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Motivation/Summary

How can we help you mine for investments?

- A visual and interactive way for people to invest.
- Financial ratios and specific industry information
- Average rate of return, P/E ratio, dividend yield, dividend rate, volatility, Sharpe Ratio etc for each stock under analysis.
- Try to visualize production and consumption of mining data and learn where the mines in the US are located.

Motivation/Summary

The questions we asked:

- How has demand changed for mining/metals over the last 9 years? Where are the mines located and does any correlation exist between with demand/production in those states? What is causing the demand for these mined minerals?
- What mining companies are the best to invest in based on historical data?
- Where do our mined minerals come from?
- What criteria will be used to determine which stock to invest in?

Questions & Data

- We used the highest performing domestic stock, specifically based upon market capitalization.
- We used an index as a benchmark to compare our mining stocks. XME was chosen as it represents all the metals and mining companies that are included in the S&P500.
- Additionally, we pulled data from the Energy Information Administration on consumption and production of minerals.
- We also included information that contains the locations of all US mines from the U.S. Geological Survey.
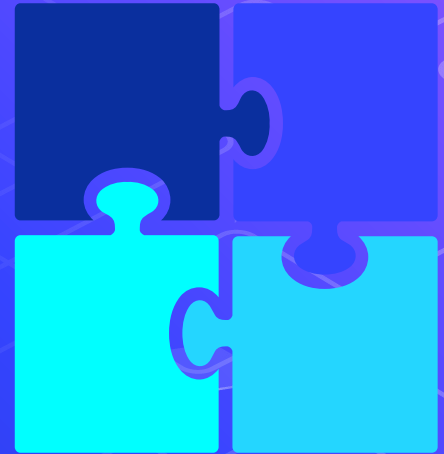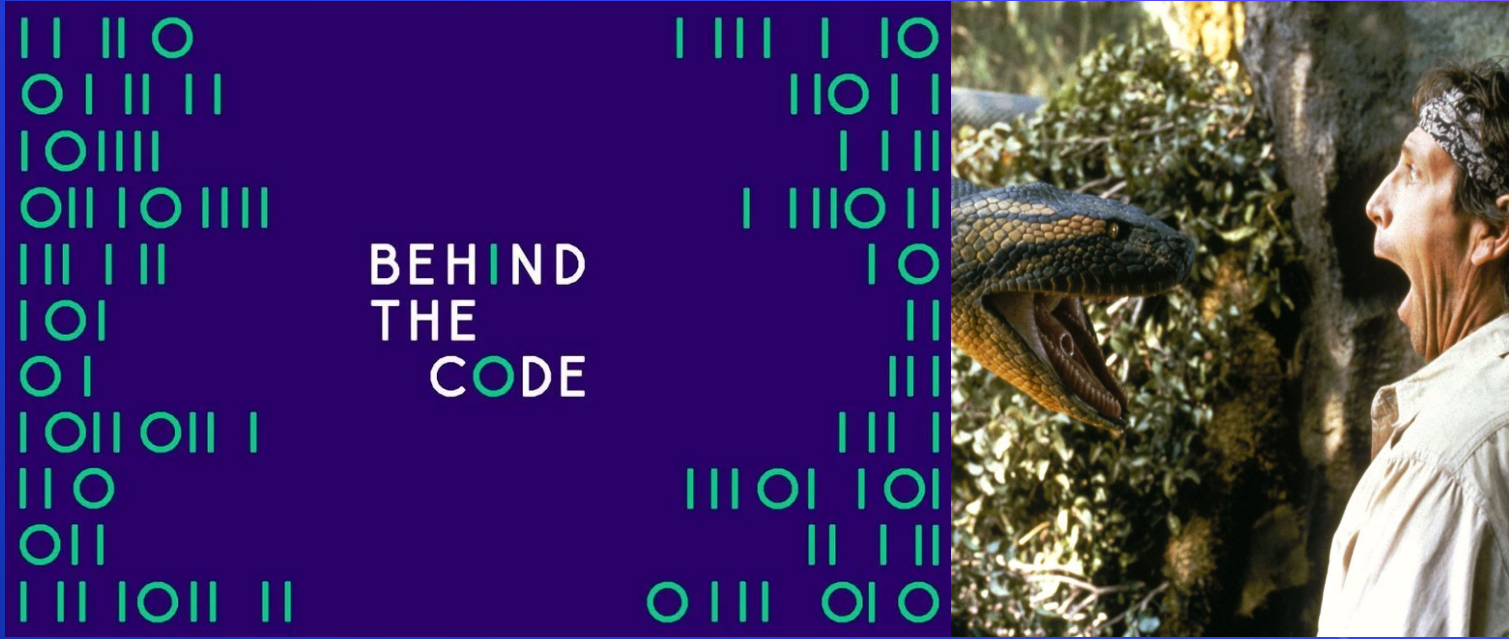
Data Cleanup & Exploration

- Painful
- Functions to splice and organize
- Pandas to read in files
- Concatenate to join data sources
- Transpose data frames
- Used API for stock data and for maps (Alpaca and MapBox)
- Python libraries (re, mpl.toolkits.mplot3D and pandas datareader)

Data Analysis/ Code walk Through

Postmortem

Difficulties and workarounds:

- Pulling real time financial ratios due to lack of $$ - we used static data
- Finding usable libraries
- Confining our analysis to constraints of the time allotted and data available

Opportunities for improvement:

- Expand the number of stocks under analysis
- Expand to the global market
- Upload and plot larger datasets

Questions?

Thank You

Now go get that mining stock!

Go get it ➜