

## Final Project – 2021 VolaTrade Cryptocurrency Trading Dashboard [Alpha Release]

Name: Keaton Currie

Email: [kdcurrie@dons.usfca.edu](mailto:kdcurrie@dons.usfca.edu)

Repo Link: <https://github.com/kdcurrie/VolaTradeTradingDashboard>

Website Link: <https://kdcurrie.github.io/VolaTradeTradingDashboard/>

### Overview

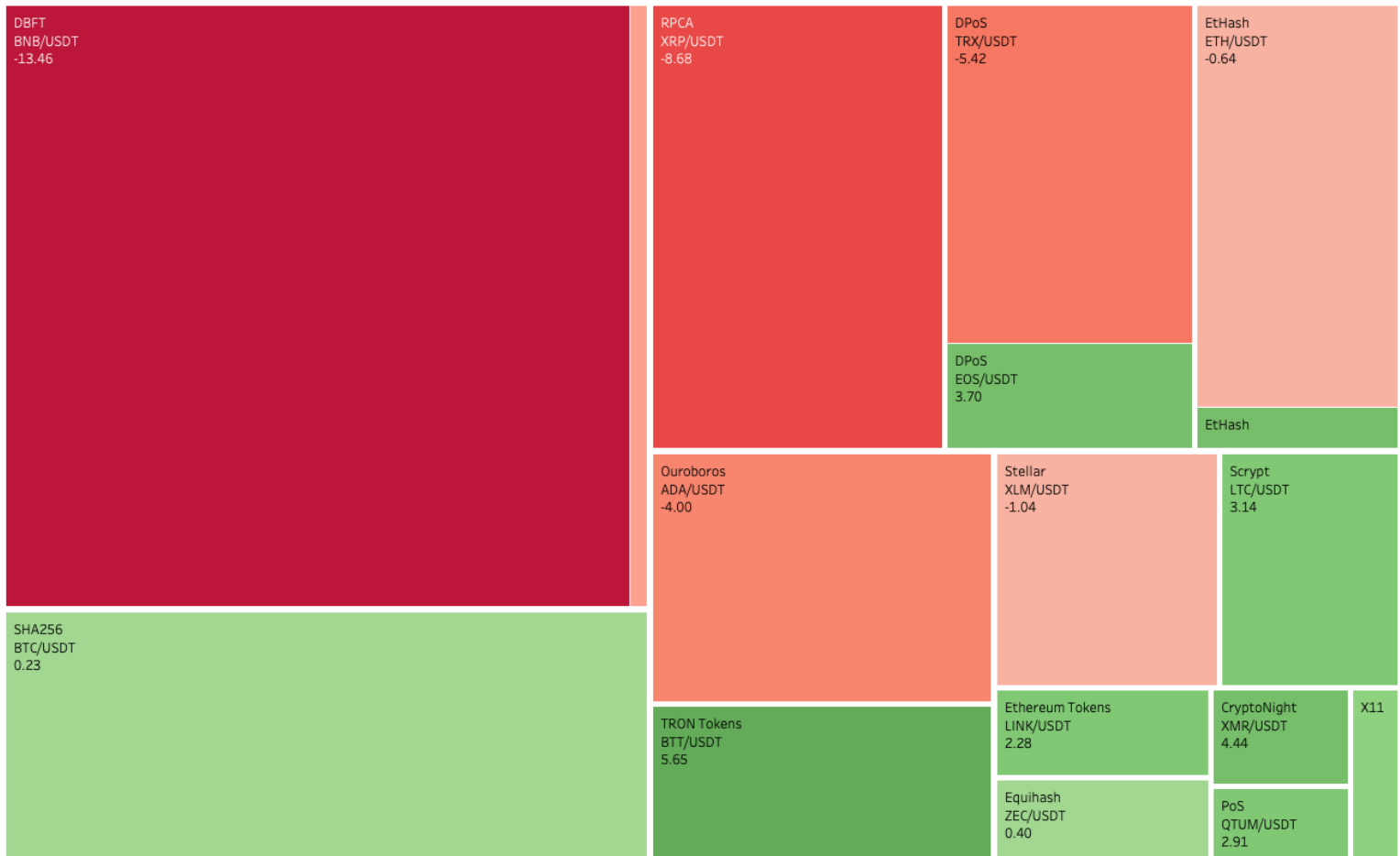
As of right now I have completed three static visualizations for my project. 2 out of 3 I have created in d3, and the last one I created in tableau. Creating these charts has given me a strong foundation to begin further customization of my visualizations, and in the next few days I will have finished most of the interaction for all of my visualizations. Any required data transformations have been done using the built in GNU sort on MacOS. Currently all three visualizations are placed on the website statically using bl.ocks.org. Once I have added interactivity to all of the visualizations, I will work on embedding each visualization onto my website directly.

### Completed Features

1. Candle Stick Chart
  - a. Static chart is complete for 1 min time interval
  - b. Dynamic date displays either time, or date
  - c. CSS styling is currently being used
  - d. Green/red colors used to indicate bullish or bearish candles
  - e. Data transformation is complete, just required reversing order of data
  - f. Zooming, panning, interactive tooltip will soon be completed

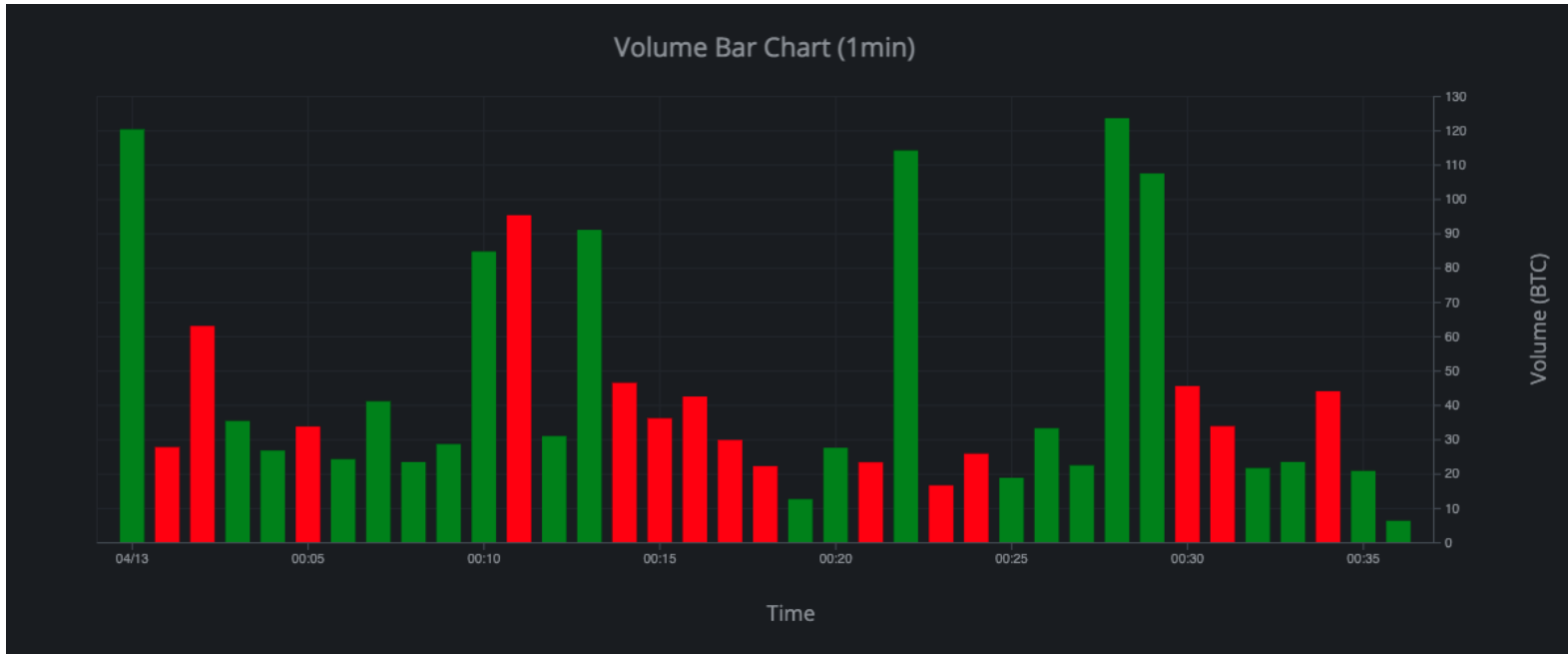


1. Tree Map with Diverging color scale
  - a. Static chart created in tableau
  - b. Displays family (Hashing algorithm), symbol abbreviation, and price performance for the given time interval (currently 1 day)
  - c. Uses a diverging color scale which indicates a negative (red) or positive (green) price performance
  - d. I will create static visualization using d3 soon, and add interactive tooltip



## 1. Volume Bar Chart

- Static chart is complete for 1 min time interval
- Dynamic date displays either time, or date
- CSS styling is currently being used
- Green/red colors used to indicate bullish or bearish candles
- Zooming, panning, interactive tooltip will soon be complete



## Upcoming Immediate Milestones

- By April 16<sup>th</sup> I plan to complete the interactive features for my volume bar chart, currently I have not started on this. Hovering over the volume bar chart with show the date/time and volume (in both USD and the asset itself).
- By April 18<sup>th</sup> I plan on completing the interactive features for my candle stick chart. I have already started this, setting up the initial work in order to implement scrolling and zooming. On top of this I will be adding an interactive tooltip when hovering over each candlestick. The tooltip will display the (open, high, low, close), and it will display the price, and date/time.
- By April 20<sup>th</sup> I plan on completing my price performance tree map in D3, and I plan on having the interactive tooltip that will be ready by then as well. The interactive tooltip for the tree map will display the volume, trade count, asset, family, and price performance for the given time interval.
- Once these 3 charts are fully complete with interaction, I will work on adding separate time interval tabs for each of my charts, and I will work on my slides for the beta release and create a demo on my website.

## Roadblocks

1. I have decided to go with a tree map with a diverging color scale instead of a heat map for my third visualization. There is too little difference in the price performance of all of these pairs to create an effective heat map color scale. Also, in the future a tree map will be useful once I start collecting data for more pairs.
2. I planned to have all 3 visualizations complete using D3 by the Alpha release, but I got very sick from my covid vaccine, so I was only able to create 2 of the visualizations in d3 so far. The tree map has not been completed using D3 yet, but by April 20<sup>th</sup> it will be done.