Visualizing the Cryptocurrency Ecosystem
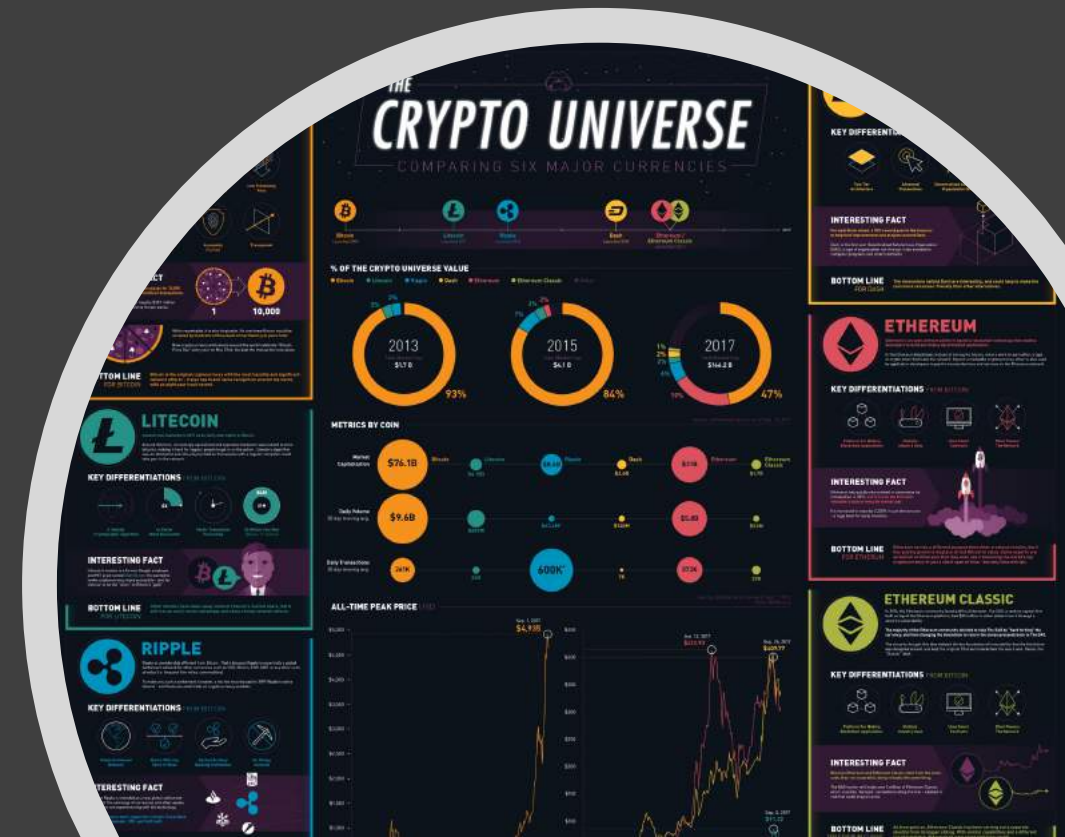
Cypherfunks

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Why Crypto-currency?

- 10 years ago people are talking about cloud computing
  - "Above the clouds: A Berkeley View of Cloud Computing."
- Few years ago people are talking about AI Machining Learning
- Today, people are talking about Crypto and Blockchain
- Evident 1. The price of bitcoin grows rapidly
- Evident 2. No matter how un-safe, how many bad news, the price will grow back
- Evident 3. Every day, you will hear one or so news/tweet about ICO, bitcoin, other Crypto-currency or Blockchain. No matter good news or bad news.
- Evident 4. Ask your friends around you, even your mom know something about bitcoin.
- Evident 5. There are companies that built base on Crypto-currency.

E-payment will be the next payment method

- Just look at CHINA now, no one use physical money to pay ANYTHING.

- Just imagine that if Wechat pay call their money WechatCoin instead of RMB, do people really care?

- We want to know is it **possible** for Crypo-currency like BitCoin to closed-circuit and be widely used, like Wechat pay, or Aliapay.

- We **DO NOT** believe in anything native, we only believe in the fact. Where is the fact? **Exploratory data analysis**! And we think that our investigation can make you confidence about Crypo-currency!
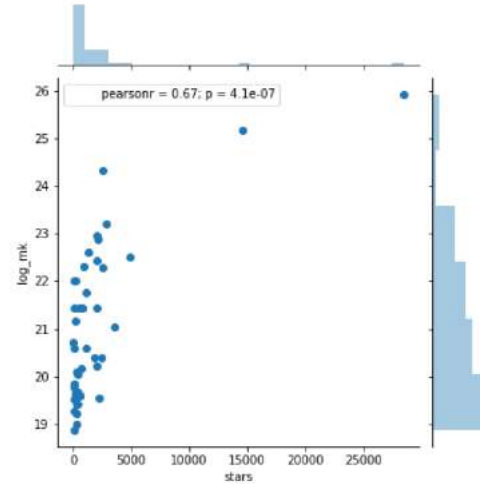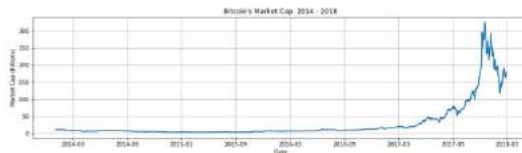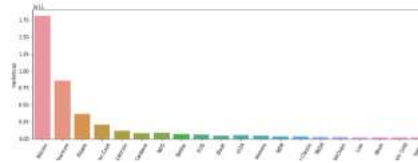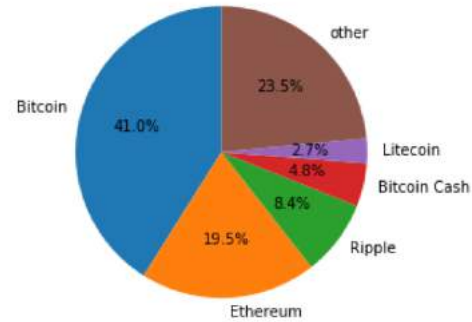
Challenges

- Data, Data, Data we need Data!!
  - Web Crawler, Web API's
    - How ? What ? Where?
- What Infrastructures should we use to save huge dataset?
  - HDFS ? Cassard? MongoDB?
  - Save in VM ? Save in S3?
- Sentiment analysis
  - We need to extract information from text
    - Ex: Are they happy about bitcoin?
- What do you mean to Visualize ? Is there any metrics ?
  - EDA , plot the graphs!
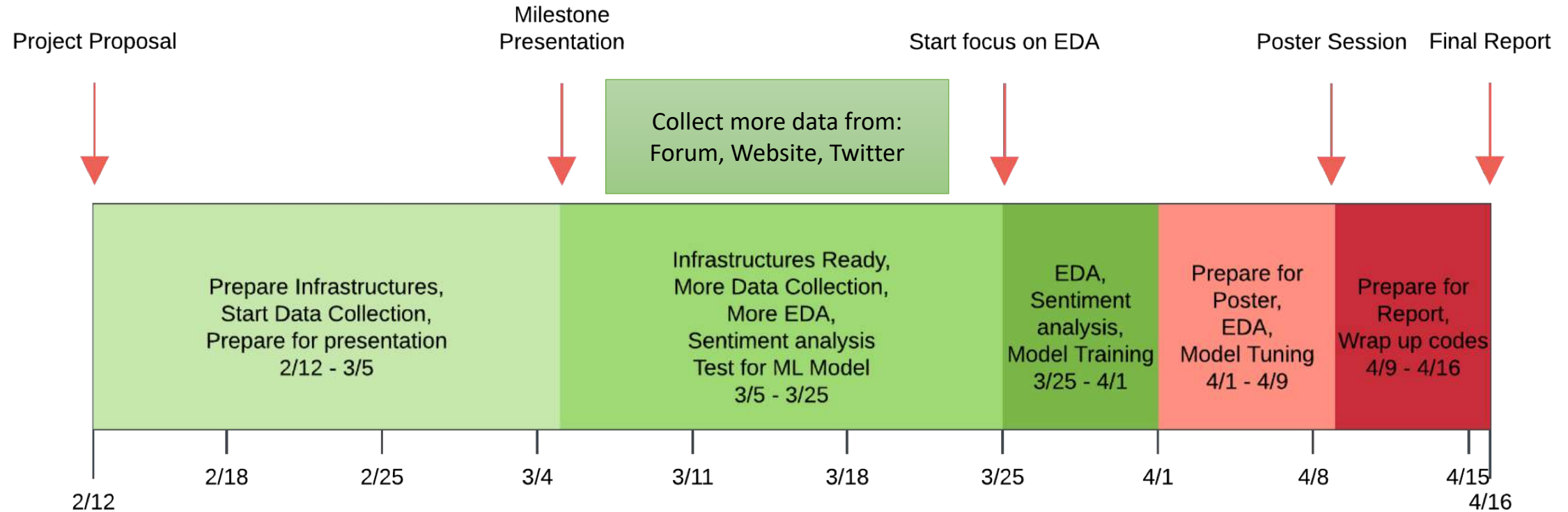 - We would apply ML model after we found the secret relationships!

Progress

- We started our Web Crawler on Github and CoinMarketCap

- We have done some EDA with our data

- We are building our VM and may consider using cloud services such as AWS and Azure.

- We had an early plan of getting data and we are in a GOOD SHAPE

Plans and Future Work

- We will need more data from different places – Up until the end of our data collection period (3/25)
- Predict Price ?! Again ?
    - This is the best way to prove our EDA result!