

## BitCoin Caster - Finalist - TOP 5 Projects - Miami Bitcoin Hackathon Jan 19th - 21st, 2018



### BitCoin Caster (aka MEVIACOIN) - Finalist - TOP 5 Projects



Jan 19th, 2018 I attended the [Miami Bitcoin Hackathon](#) held right at the LAB MIAMI in

Wynwood, FL. I created a team called MEVIA, nobody signed up, only one person joined as he was left out and decided to be part of it, but didn't know how to code, so it was mostly some support researching the web for information.

The main concept was how to connect the ALEXA device, or any other "Audio Video System" AVS with the world of cryptocurrencies, and what could be done with ALEXA to see what else todo.

One of the interesting things that was done was the conversion of TEXT to SSML and reading that back with ALEXA voice into the "Alexa Skill."

## The Code

The code was written mostly in Python, although I mounted a bitcoin miner, now in operation under **meviacoin.com** and **node-01.meviacoin.com**. At the time of the hackathon, I was not very understanding on the blockchain data structure, nor what por was used for the Bitcoin Node, I had to figure out how the RPC could be used to connect to the blockchain node and retrieve information that was important for the ALEXA Skills that I was creating.

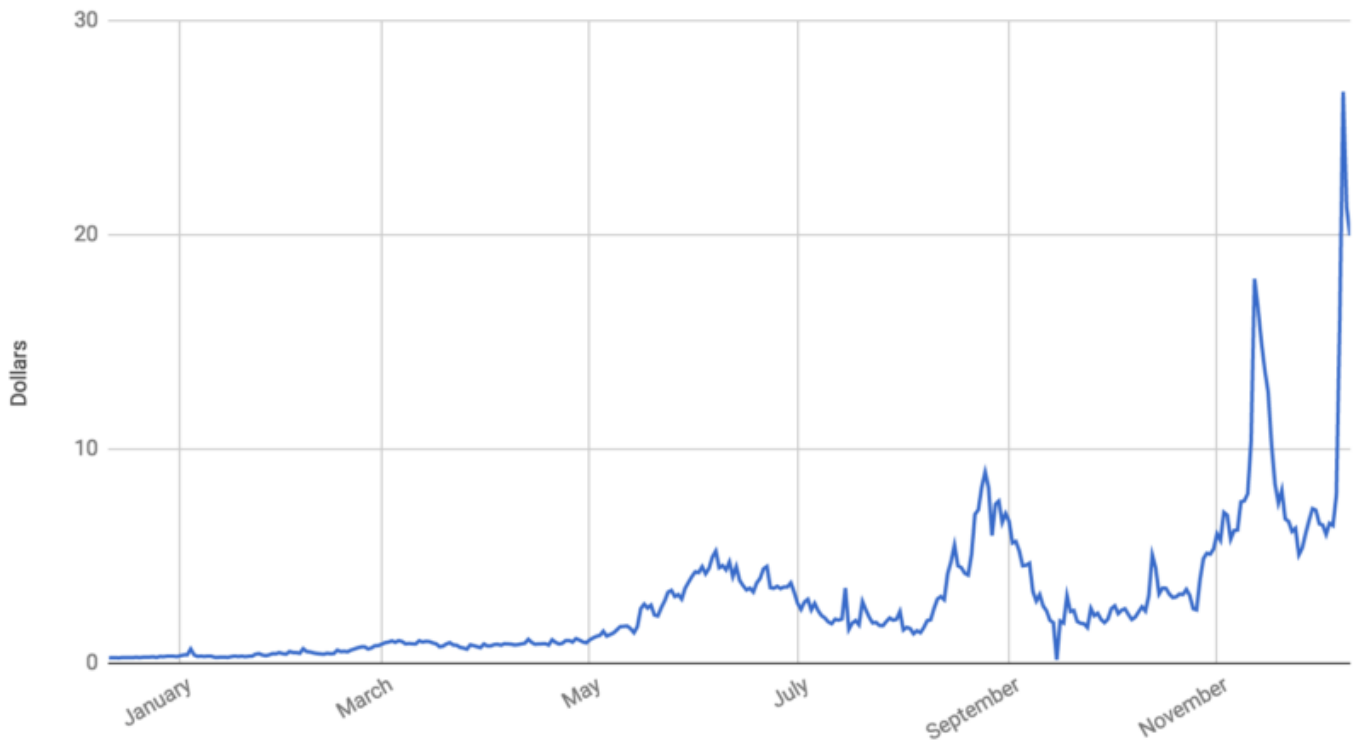
The main issue was asking ALEXA:

What is the cost of a bitcoin transaction in dollars [or Euros]?

As this is currently a major dilemma in this stage and age, what is the cost? Cost for Bitcoin transactions varies with time, according to an article posted by ARSTECHNICA ([here](#)). Bitcoin fees went from cents to dollars per transaction, so it would not be practical to transact a latte if your transaction fee is 2x or 3x the value of such beverage.

Hence, the main question we ask is then, what is a transaction fee?

## Average fee to make a Bitcoin payment



The Blockchain itself and the **bitcoin-cli** includes an estimator that is done using the total number of transactions and the cost per block. For example:

```
bitcoin-cli estimatefee 6
```

As expected, if you don't have an API in hand this might be the easiest way to obtain the estimated value of 6-blocks transactions. Ad of today, I run this into my node at 9:33AM EST and the result is:

```
bitcoin-cli estimatefee 2 0.00032849    bitcoin-  
cli estimatefee 6 0.00006547
```

This shows that you can then compute for a 1MB transaction the cost per bitcoin transfer, based on the rewards the system is requiring.



## PROBLEM

Find a quick and easy way to access to Bitcoin Pricing, Transaction times, and Commission Fee using personal Assistants (e.g. Amazon's Alexa)



Now the interface, requires an audio interface to do this and make it fast and easy.

## The solution: ALEXA SKILLS and BITCOIN CASTER

The code for **bitcoin-alexa**

[https://github.com/win2013/bitcoin\\_alexa](https://github.com/win2013/bitcoin_alexa)

The code can be found on the github under my account, win2013, as **bitcoin-alexa**

[https://github.com/win2013/bitcoin\\_alexa](https://github.com/win2013/bitcoin_alexa)

Load the python app, **bitcoin-alexa**, and run the server in port 5000. I suggest to use **ngrok** and you will get something like:

```
ngrok by @inconsreveable (Ctrl+C to quit)  
Session Status online
```

Version 2.2.8  
Region United States (us)  
Web Interface <http://127.0.0.1:4040>  
Forwarding <http://6e3e50f7.ngrok.io> -> localhost:5000  
Forwarding <https://6e3e50f7.ngrok.io> -> localhost:5000  
Connections ttl opn rt1 rt5 p50 p90  
0 0 0.00 0.00 0.00 0.00

Once you get this working, you will be able

```
bitcoincaster.py  CostPerTransaction  templates.yaml  btcprice.py  CostPerTransaction.py  PredictedPrice.py
22  __author__      = "Edwin Hernandez, PhD"
23  __copyright__   = "Copyright 2018, Edwin Hernandez LLC"
24  __version__     = "0.1"
25
26  @ask.launch
27  def new_game():
28      welcome_msg = render_template('welcome_msg')
29      return question(welcome_msg)
30
31  def to_currency(s):
32      if s.lower() not in ['dollars', 'euros']:
33          raise Exception("must be dollars or euros")
34      return "eur" if s == 'euros' else "usd"
35
36
37  @ask.intent("NoIntent")
38  def choose_from_no_options():
39      global b_Scheduled
40      schedule_msg_not = ""
41      if (not b_Scheduled):
42          schedule_msg_not = render_template("not_scheduled")
43          choose_msg = render_template("instructions") + schedule_msg_not
44          return question(choose_msg)
45
46  @ask.intent("YesIntent")
47  def choose_from_opotions():
48      schedule_msg = ""
49      global b_Scheduled
50      if (b_Scheduled):
51          schedule_msg = render_template("scheduled")
52          b_Scheduled = False;
53          choose_msg = render_template("instructions") + schedule_msg
54          return question(choose_msg)
55
56  @ask.intent("PriceIntent", convert={'currency': to_currency})
57  def last_price_bitcoin(currency):
58      BTCP = BTCPricing()
```

## Presentation

[slideshare id=86474778&doc=miami-bitcoin-hack-a-thon-180121122620]

## BITCOINS

At the end of the day we made some BTC and learned a ton.

