



Ariel de la Zerda
CSC 595 - D
Dr. Rosenberg
Due 1st April 2019

BULL OR BEAR: LITECOIN

TIMELINE (WIKIPEDIA)

2000 – Creator Charlie Lee earns his Bachelors and Masters in Computer Science from MIT.

October 2011 – 150 LiteCoins released on Bitcointalk. It was created in Lee's spare time working at Google.

November 2013 – Reaches \$1 billion market capitalization

July 2013 – Lee began working at Coinbase

May 2017 – Litecoin becomes first of the top 5 cryptocurrencies (by market cap) to adopt Segregated Witness. Later that month, Lightning Network was put forwards for use.

November 2018 – over 59 million LTC in circulation (supply limit is 84 million vs 21 million BTC)

FUN FACTS (WIKIPEDIA)

- Latest release is 0.16.3 from 19 September 2018
- Written in C++ language
- Subunits are milli-LiteCoin ($1 / 1 * 10^3$) and micro-Litecoin ($1 / 1 * 10^6$)
- 2019 block reward is 25 LTC, halved approximately every four years

MOTIVATIONS (ASOLO)

- Block processing is faster than that of BitCoin. 2.5 minutes per block versus BitCoin's 10 minutes per block.
- Utilizes the Scrypt ASIC proof-of-work algorithm. Compared to BitCoin's SHA-256 algorithm, Scrypt ASIC which is less complex and does not require such a high hash rate, which contributes to the 2.5 blocks/minute mark

SCRIPT ALGORITHM (ASOLO)

- Proof-of-work: miner is required to find a value that is equal or less than a candidate block header hash (the lower the give target value, the more difficult)
- March 2019 hash rate: 146 TH/s (trillion hashes per second) (Litecoin Hashrate Chart)
- Unlike SHA-256, Scrypt is memory intensive, because the generated numbers are stored in the RAM of the processor
- Defense against Sybil attack is similar to that of BitCoin except the cost is high memory intensity instead of processor intensity
- Though GPU mining was optimal in the beginning, ASIC mining was introduced in 2013 and is the optimal choice for LiteCoin Mining (Rothrie)

HOW ARE INITIAL COINS DELIVERED?

- Like Bitcoin, winners of the mining lottery are awarded 25 LTC for each block mined, yet unlike Bitcoin, this quantity is halved every 840,000 blocks (instead of 210,000) (Cryptopay Blog)

BOOTSTRAP.DAT

- What is a bootstrap? It's a copy of blockchain from genesis to a certain point. This compressed bootstrap.dat file speeds up initial blockchain download times
- <https://litecoin.info/index.php/Bootstrap.dat>
- <https://bchain.info/LTC/bootstrap.dat> (3.1 GB)

COMMUNITY

- Unlike Satoshi Nakamoto, Charlie Lee is not anonymous and participates in the development (his twitter handle is @SatoshiLite)
- However, Lee sold his coins during the “Great Bubble”, though Lee claims it is to separate his own financial motivations from the development of the project (conflict of interest) (VK, Anirudh) this is a source of controversy amongst crypto investors
- Litecoin Foundation is a non-profit organization (registered in Singapore) with the mission of “advancing Litecoin for the good of society by developing and promoting state-of-the-art blockchain technologies.”
- Several forums exist; reddit.com/r/Litecoin, LitecoinTalk.io, and other general forums exist with Litecoin subtopics
- Also check Litcoin.org and Litecoin.com

BULL OR BEAR? (DEPENDS ON YOUR TIMEFRAME)

- Preface: there are two layers of investment here: 1) crypto currency itself 2) Litecoin amongst the cryptos
- Most cryptos follow very similar cycles, though “memecoins” don’t do as well as goal-oriented coins
- 85,907% growth is noteworthy
- 7/10 unscientific analysis says to hodl, at minimum to capitalize on another bubble
- Peak was \$322.94 on December 16th 2017
- Previous floor was \$22.95 in December 13th 2018 (if you invest \$100 then, you’d have \$262
- Bull for 5 year, but Ariel’s hunch is another bubble will dilute the picture



BIBLIOGRAPHY

- Asolo, Bisola. "Litecoin Scrypt Algorithm Explained." *Mycryptopedia*, 18 Dec. 2018, www.mycryptopedia.com/litecoin-script-algorithm-explained/.
- Cryptopay Blog. "Litecoin vs Bitcoin: the Core Differences." *Medium*, The Cryptopay Blog, 4 Apr. 2018, medium.com/cryptopay/litecoin-vs-bitcoin-the-core-differences-25e5d18078cb.
- "Litecoin Hashrate Chart." *BitInfoCharts*, bitinfocharts.com/comparison/litecoin-hashrate.html
- "Litecoin." *Wikipedia*, Wikimedia Foundation, 30 Mar. 2019, en.wikipedia.org/wiki/Litecoin.
- Rothrie, Sarah. "Scrypt ASIC vs. SHA-256: Explaining the Options for 2018." *CoinCentral*, 16 Oct. 2018, coincentral.com/scrypt-asic-vs-sha-256-explaining-the-options-for-2018/.
- VK, Anirudh. "Charlie Lee States He Sold Litecoin [LTC] Because It Was a 'Conflict of Interest.'" *AMBCrypto*, 25 Sept. 2018, ambcrypto.com/charlie-lee-states-he-sold-litecoin-ltc-because-it-was-a-conflict-of-interest/