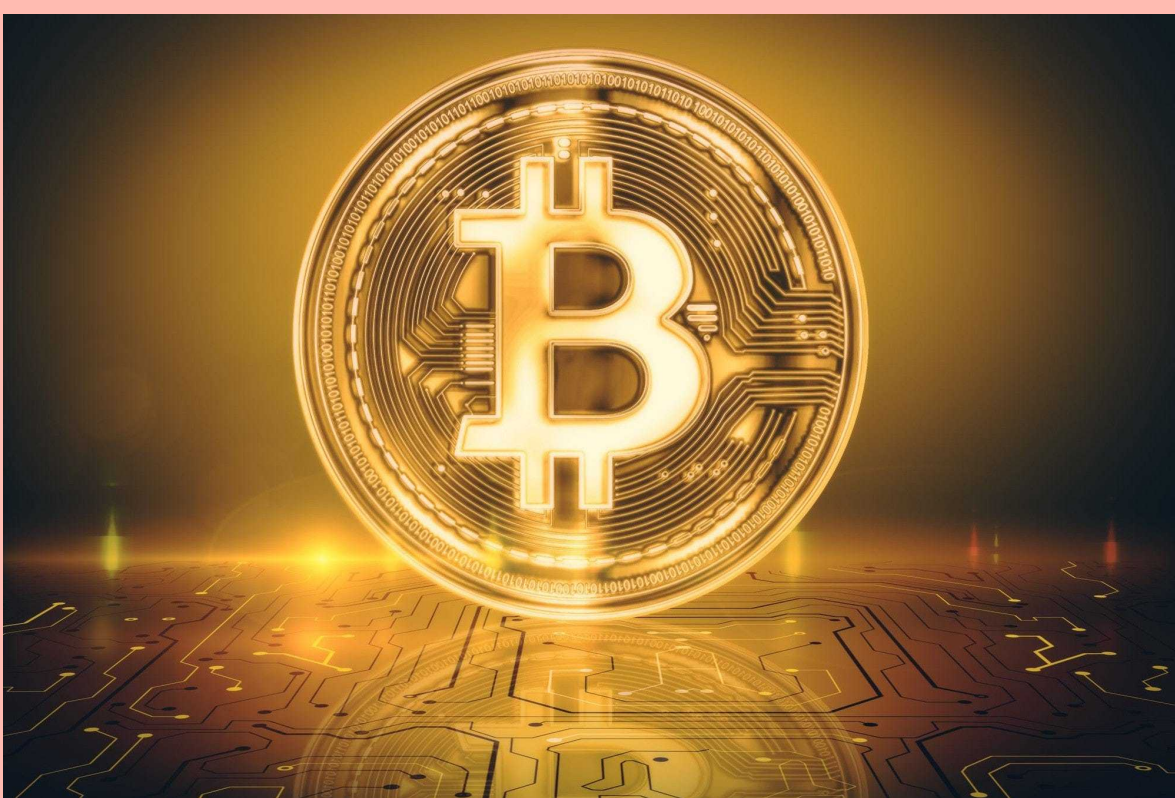


**Tools and Methods:**  
Downloaded data from glass node, cleaned the data in excel and used jupyter notebook with pandas, numpy, and matplotlib to make data visualizations. Committed to GitHub repo.

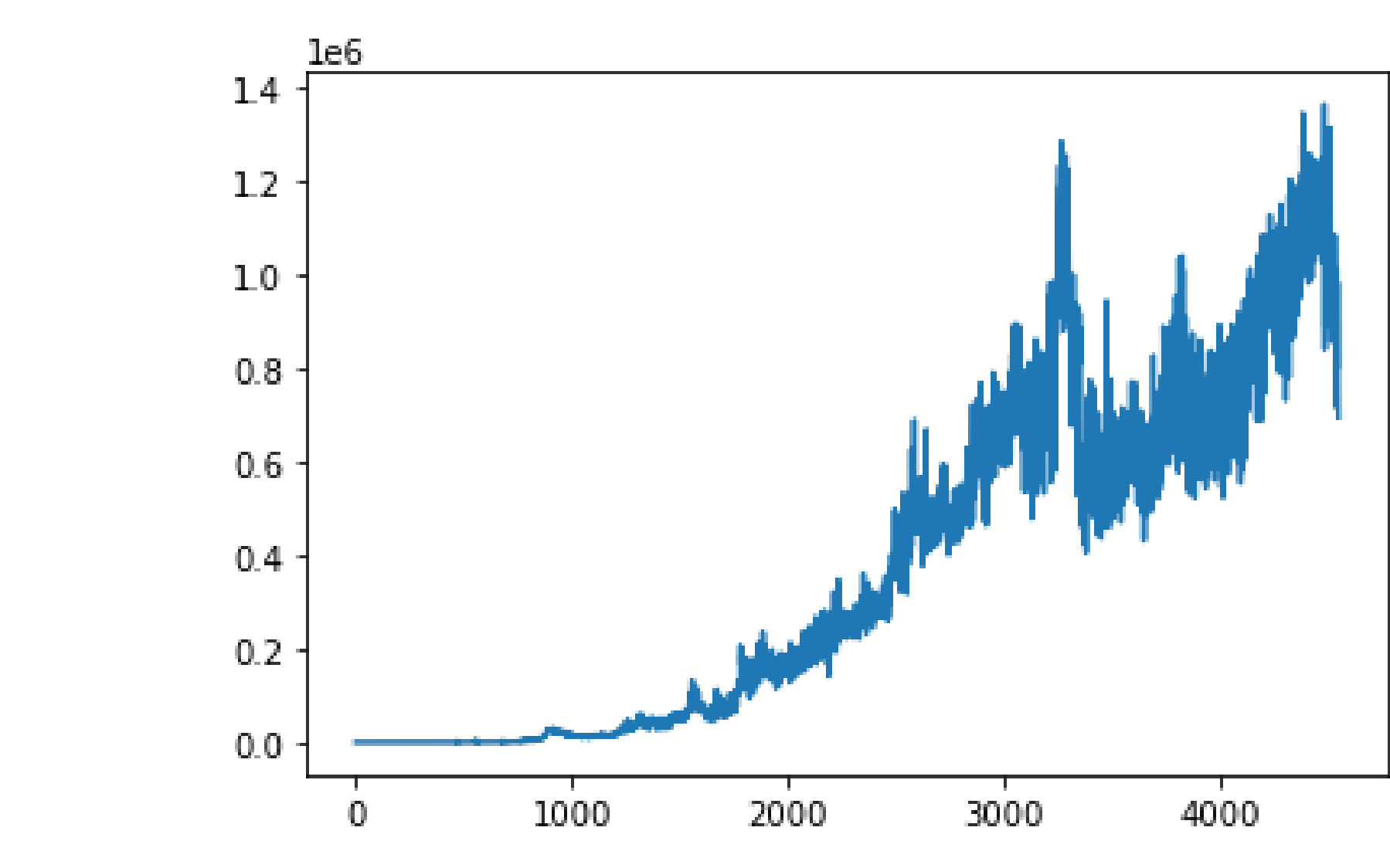
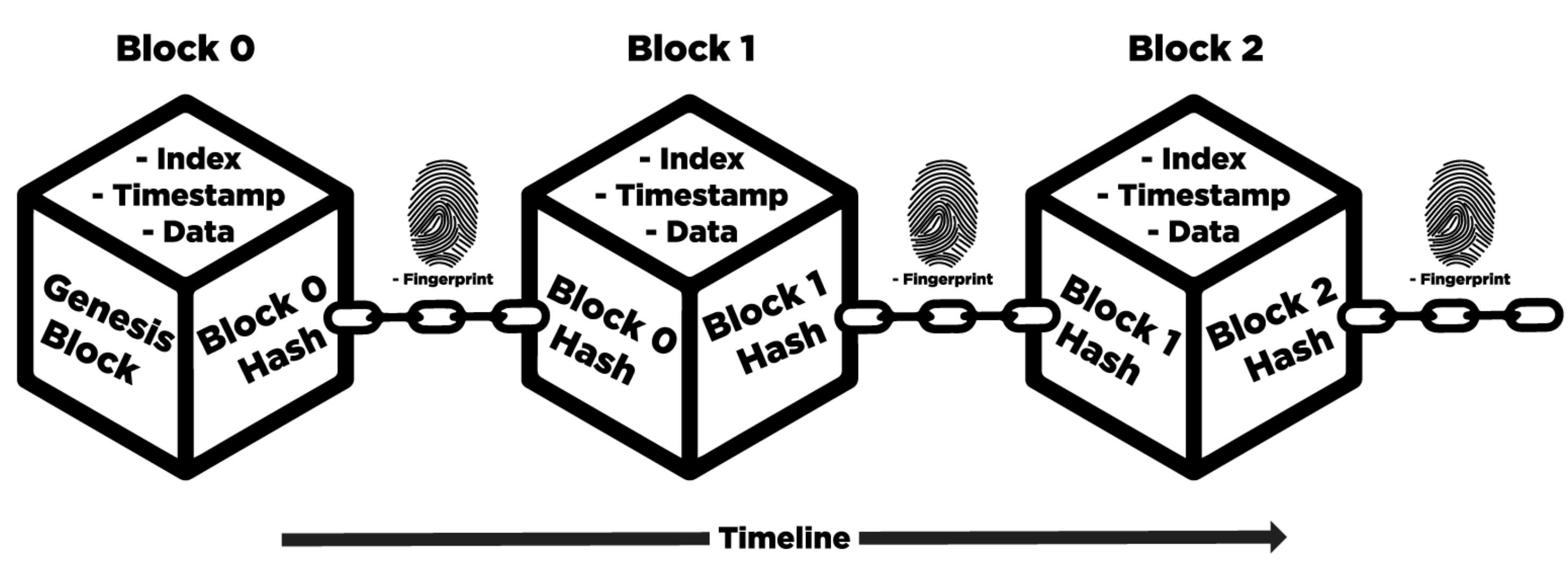
**Project Description:**

Digital blockchain cryptocurrencies were first created “on January 2009, the bitcoin network into existence with Satoshi Nakamoto mining the genesis block of bitcoin (block number 0)”. Bitcoin has become an essential medium of exchange and store of value for millions around the world. Mainstream adoption is continuing to accelerate and the number of users are growing exponentially. This analysis will use on chain data to show how the new revolutionary tech is disrupting future industries.

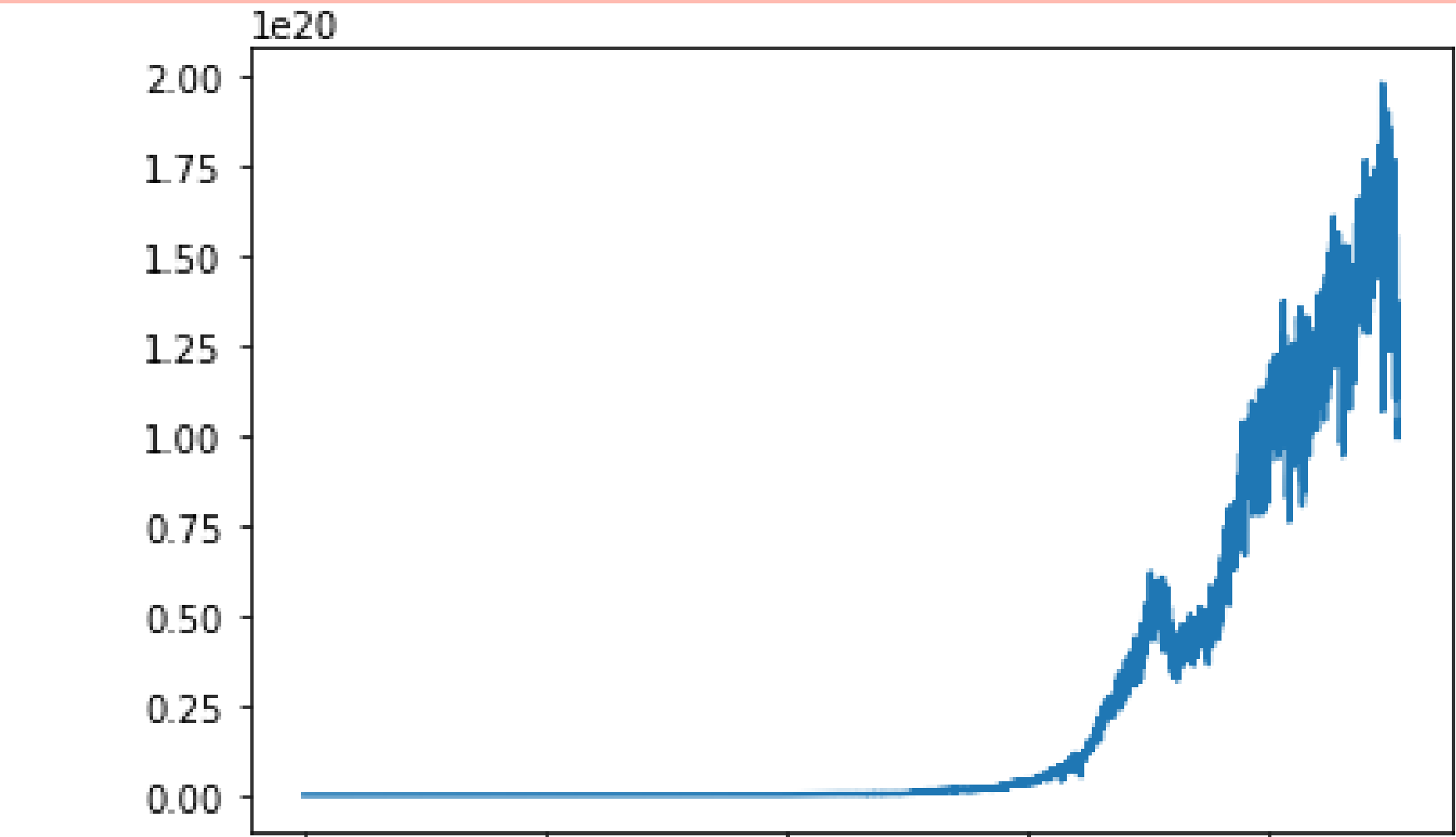
Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust-based model.... What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Blockchain - The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. <https://bitcoin.org/en/>



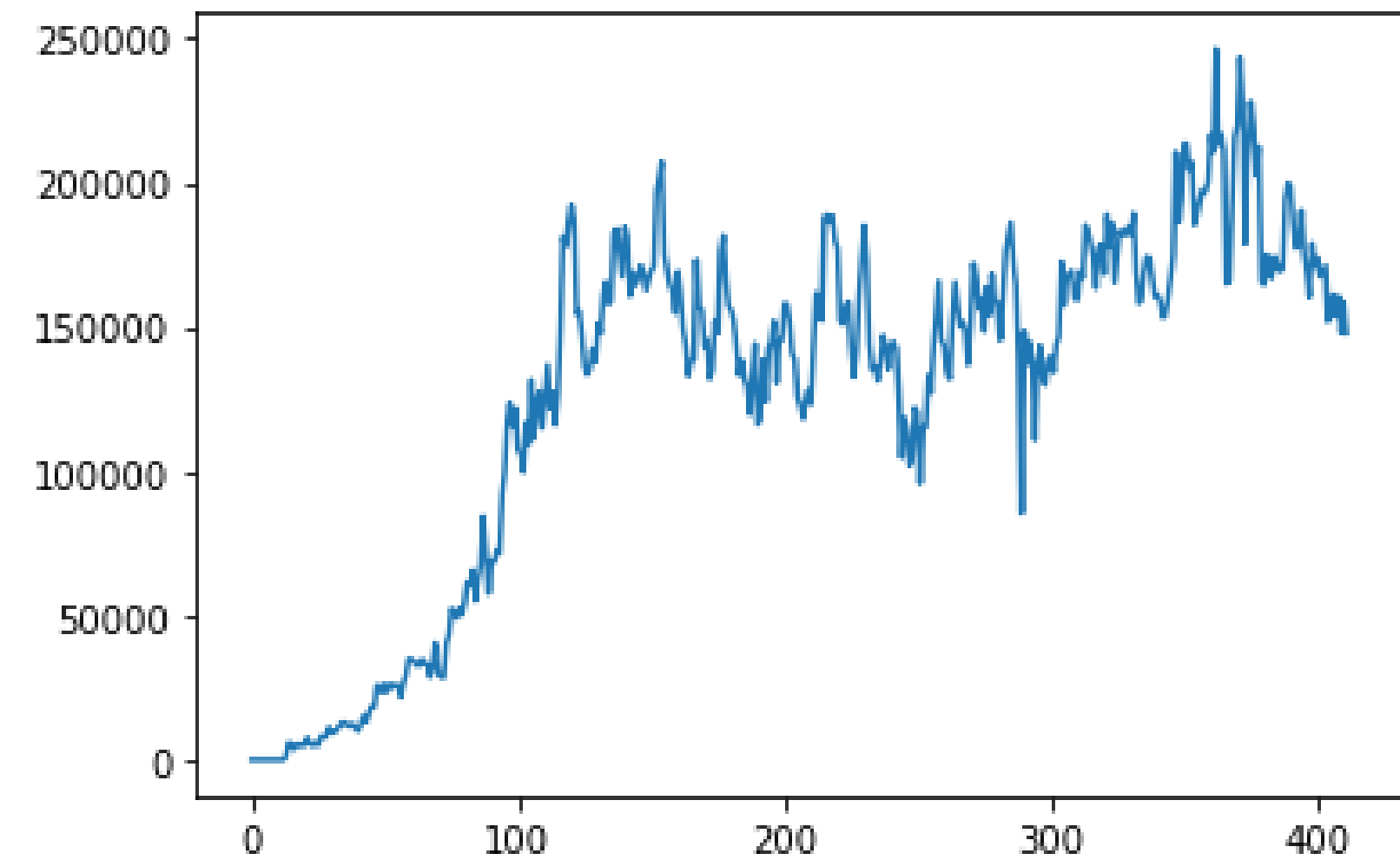
A **blockchain** is a growing list of records, called blocks, that are linked together using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a Merkle tree). The timestamp proves that the transaction data existed when the block was published in order to get into its hash. As blocks each contain information about the block previous to it, they form a chain, with each additional block reinforcing the ones before it. Therefore, blockchains are resistant to modification of their data because once recorded, the data in any given block cannot be altered retroactively without altering all subsequent blocks. <https://en.wikipedia.org/wiki/Bitcoin>



active btc users



btc hash rate



uniswap transactions

**Work Cited**  
**include the work you are citing:**

- 1) The Future of blockchain
- 2) The name of the course (DH 100)
- 3) Instructor: Dr Anderson
- 4) Student: JohnMatthew Garcia
- 5) The works in the corpus you cite
- 6) Jupyter Notebooks
- 7) <https://bitcoin.org/en/>
- 8) <https://glassnode.com/>
- 9) <https://en.wikipedia.org/wiki/Bitcoin>
- 10) <https://github.com/johnmgarcia>

If you fail to cite your work, you will be plagiarizing (whether intentionally or not).

**Interpreting your results:**

- 1) Active bitcoin users have been growing since the inception of the minin g of the first block
- 2) The Bitcoin hash rate has been growing at an expontential rate climbing to a high of XX G/kwH. This is important to maintain decentralization and network security.
- 3)The exponential rise in decentralized finance on Ethereum (uniswap) over the past year was followed by stable, rangebound movement, signaling increased adoption for defi protocols.

**\*\***You may want to include a subset of your results, to make it easier to explain how the language model is working.

**Conclusion:**

Blockchain technology is a new asset class that enables censorship resistant, trustless, sovereignty to billions of people around the world including the 1B unbanked. While prices and hashrate fluctuates, we have and I expect continute to have mass adoption globally.