

GPT-3 vs GPT-4 via an example...



Bitcoin: A Peer-to-Peer Electronic Cash System

Satoshi Nakamoto
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Analysis performed 8-30-2023

...chain-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.



We asked GPT-3 (4k) to summarize this document...



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9 pages

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SUMMARY #1

- 1. The Bitcoin system proposed by Satoshi Nakamoto uses digital signatures and a peer-to-peer network to timestamp transactions and prevent double-spending.**
- 2. Transactions are timestamped by hashing them into a chain of proof-of-work, which serves as proof of the sequence of events witnessed and the largest pool of CPU power.**
- 3. The paper discusses the concept of electronic coins, the problem of double-spending, the need for a timestamp server, and the use of proof-of-work to implement a distributed timestamp server.**
- 4. It explains the network structure and the incentive for nodes to support the network.**
- 5. The system has the potential to transition from new coin rewards to transaction fees and reclaim disk space by discarding spent transactions.**
- 6. The paper also covers topics such as block headers, simplified payment verification, combining and splitting value, privacy, and calculations.**
- 7. The proposed system aims to enable electronic transactions without relying on trust.**

GPT-3 (4k) stats

INPUT TOKENS
5,615

OUTPUT TOKENS
716

OpenAI API CHARGES
0.009¢ USD

EXECUTION TIME
26 seconds

KALYGO FINAL INVOICE
0.50¢ USD



We then asked GPT-4 (8k) to summarize the same document...



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9 pages

...then added proof of work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.



SUMMARY # 2

- 1. The summary is based on the Bitcoin whitepaper, authored by the pseudonymous Satoshi Nakamoto.**
- 2. Bitcoin is introduced as a peer-to-peer electronic cash system, enabling direct online payments between parties, bypassing financial institutions.**
- 3. The system employs digital signatures and a proof-of-work system to prevent double-spending.**
- 4. All transactions are timestamped and recorded in a chain of hash-based proof-of-work, creating an immutable record.**
- 5. The longest chain is considered as proof of the sequence of events and is indicative of the largest pool of CPU power.**
- 6. The Bitcoin network requires minimal structure, allowing nodes to freely leave and rejoin.**
- 7. The whitepaper also discusses incentives for nodes to support the network, the process of combining and splitting value, privacy considerations, and calculations related to the probability of an attacker successfully altering the transaction history.**
- 8. Overall, the Bitcoin whitepaper presents a comprehensive overview of the Bitcoin system, its underlying technology, and its potential implications for the future of financial transactions.**

GPT-4 (8k) stats

INPUT TOKENS

5,194

OUTPUT TOKENS

378

OpenAI API CHARGES

\$0.17 USD

EXECUTION TIME

37 seconds

KALYGO FINAL INVOICE

\$0.72 USD



GPT-3 vs GPT-4



**Which
summary did
you think
was better?**

<https://kalygo.io>

