

← Back to results Assignee: Sharma, Aditi DR; Inventor: aditi sharma;

A collaborative mining network (cmn) to execute computationally intense mining tasks in mobile blockchain

Abstract

A COLLABORATIVE MINING NETWORK (CMN) TO EXECUTE COMPUTATIONALLY INTENSE MINING TASKS IN MOBILE BLOCKCHAIN ABSTRACT As the data used varies from megabytes to petabytes, the storage capacity needs to be increased. For which the cloud storage is used, and it is distributed accordingly. This performs fusion to collect the data. Also, in some cases, the data which is stored should be mined for performing the matching or prediction. For performing such a massive transaction-intensive computation helps by using specific techniques or algorithms to resolve computational complexity. Also, Blockchain is an emerging technology that is transferring cryptocurrencies. As it requires high security, the same is encrypted through the validation. Every system contains the Blockchain, which is connected in a collaborative mining network, which, in turn, is connected to the edge cloud, as it needs to store a huge amount of data. The remedy is carried out by proposing a novel designing a collaborative mining network to execute computationally intense mining tasks in the mobile Blockchain. This is done in an offline manner to manage the resources when the resources are insufficient. As there is no clarity for the order in which the seller and the buyer are supposed to transmit the data, it is implemented in a two-way strategy. In the first phase, the tasks between the neighbors are concentrated. To manage the mining tasks between the neighbor nodes is implemented using the auction model. In the second phase, the edge cloud and the neighbors are concentrated. The mining of tasks offloading from the edge cloud is done using the Stackelberg game. The blocks are generated using the SHA 256 algorithm. This improves performance and predicts the priority of the seller and buyer. 11 P a g e A COLLABORATIVE MINING NETWORK (CMN) TO EXECUTE COMPUTATIONALLY INTENSE MINING TASKS IN MOBILE BLOCKCHAIN Drawings SHA-256 sae IV Figure 1: SHA-256 algorithm Ngotsied, fid priC ,pneuf r One Pubshri FCCPnceLeai n ByroPa Cudelwi er floo One Pub lthe lor 2ndPr coAction Se coBuyers w1 Wilbyers Mr y Pubohers Ist ar 2nd Pri A ct & Buyeb Ne Olie fii xd Figure 2: Types of the auction model 11 P a g e

Classifications

■ G06F17/10 Complex mathematical operations

View 5 more classifications

Description

A COLLABORATIVE MINING NETWORK (CMN) TO EXECUTE COMPUTATIONALLY INTENSE MINING TASKS IN MOBILE BLOCKCHAIN

Drawings

SHA-256 sae

IV

Figure 1: SHA-256 algorithm Ngotsied, fid priC ,pneuf r

One Pubshri FCCPnceLeai n ByroPa

Cudelwi er floo

One Pub lthe lor 2ndPr coAction Se coBuyers

w1 Wilbyers

Mr y Pubohers Ist ar 2nd Pri A ct & Buyeb

Ne Olie xd fii

Figure 2: Types of the auction model

11 P a g e

A COLLABORATIVE MINING NETWORK (CMN) TO EXECUTE COMPUTATIONALLY INTENSE MINING TASKS IN MOBILE BLOCKCHAIN

Description

Field of the invention:

This invention relates to designing a collaborative mining network to execute computationally intense mining tasks in the mobile Blockchain. As the data used varies from megabytes to petabytes, the storage capacity needs to be increased. For which the cloud storage is used, and it is distributed accordingly. This performs fusion to collect the data. Also, in some cases, the data which is stored should be mined for performing the matching or prediction. For performing such a massive transaction-intensive computation helps by using specific techniques or algorithms to resolve computational complexity. Every system contains the Blockchain, which is connected in a collaborative mining network, which in turn connected to the edge cloud. This is done in an offline manner to manage the resources when the resources are insufficient. To manage the mining tasks between the neighbor nodes is implemented using the auction model. The mining of tasks offloading from the edge cloud is done using the Stackelberg game. The blocks are generated using an SHA 256 algorithm. This improves performance and predicts the priority of the seller and buyer.

Background of the invention:

Shaoyong Guo et al. suggests an edge-based blockchain in which every system contains the Blockchain, which is connected in a collaborative mining network, which in turn connected to the edge cloud. This is done in an offline manner to manage the resources when the resources are insufficient.

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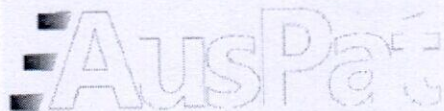
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Status • Active

2028-09-23 • Anticipated expiration

Info: Legal events, Similar documents, Priority and Related Applications

External links: Espacenet, Global Dossier, Discuss



Application Details

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: A COLLABORATIVE MINING NETWORK (CMN) TO EXECUTE COMPUTATIONALLY INTENSE MINING TASKS IN MOBILE BLOCKCHAIN

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Application details

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Invention title	A COLLABORATIVE MINING NETWORK (CMN) TO EXECUTE COMPUTATIONALLY INTENSE MINING TASKS IN MOBILE BLOCKCHAIN				
Inventor(s)	Dumka, Ankur ; Kumar, Vivek ; Ashok, Alaknanda ; Kumar, Naresh ; Sarkar, Achyuth ; Sharma, Aditi ; Loganathan, Jayakumar ; Bansal, Pravesh Kumar ; Mohd, Noor				
Agent name	Dumka, Ankur DR	Address for legal service	NSW 2145 Australia	show full address	
Filing date	2020-09-23	Australian OPI date	2020-11-05	OPI published in journal	
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IPC details

Priority details

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SPECIFICATION/E-REGISTER

EDOSSIER

LIFECYCLE DETAILS

FEE/PUBLICATION HISTORY

OWNERSHIP DETAILS

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