

PACKETMINING

Algo-Free Smartphone Based Coin Mining Empowered by Blockchain Technology

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Abstract

As blockchain technology continues to influence media headlines, cryptocurrency value fluctuations and the possible disruption of the global financial industry there is increasing interest in adoption for an expanding list of usage cases.

The average global consumer however, doesn't fully understand what cryptocurrency technology is, the place it occupies in the monetary system or why it matters, let alone how it works. This has resulted in the public perception of blockchain applications as being inaccessible and has resulted in a deficiency of mainstream adaptation to the detriment of the community.

Unfortunately, the technological potential and implications for the future remain largely obscured and mostly ignored in this space. Where, PacketMining will aspire to ensure blockchain technology is accessible to the wider global consumer audience through the following four methods:

- A smartphone friendly application interface that leverages the blockchain to allow for fun and relatively easy coin mining.
- A platform that creates a new class of 'Packet Miners' that's sticky gamey, approachable and provides an exciting new way to participate in the blockchain technology hype without the encumbrance of technical hurdles.
- An internal exchange that allows for coin removal and transfer of coins between Packet Miners.
- A finite model that distributes post ICO coins from the total distribution in a manner consistent with the number of cycle miners and the one hundred and twenty month post-ICO end date for full PAKT coin distribution.

On a more technical level, we plan to innovate within the blockchain space through practical experimentation and application of digital scarcity and our non-fungible coin. By normalizing the practical application of smart contracts and cryptocurrency transactions, we will empower everyday consumers with a basic fluency in distributed ledger technology with a far friendlier layer on top of this arcane process. Likewise, by showcasing a practical use for blockchain technology outside of the financial industry, we hope to broaden the public's understanding of the technology and its potential application, particularly with creating large user pools of low information users capable of inter-operating for common purpose.

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governing the use of the PacketMining application and platform, please view the Terms of Use here: <https://www.packetmining.com/terms-of-use>.

PacketMining: Algo-Free Smartphone Based Mining Empowered by Blockchain Technology

1. Motivation

The development of PacketMining was entirely motivated by the inaccessible way in which high market capitalization cryptocurrencies like Bitcoin are prohibitively expensive to mine and that the technical skills required to mine lesser coins or node them is technically out of the range of the vast majority of the public.

So an opportunity was born; push the OG mining fun of the early days back into the realm of accessibility and make it considerably less technically burdensome by utilizing the most ubiquitous available platform, the smartphone, with its 2 Billion rabidly active user community.

Attempts were made previously to algorithm mine on the smartphone platform, mostly unsuccessfully, as the base rudiment of calculation requirement ensures difficulty in providing a comfortable and consistent user experience.

Given another fundamental approach must be then taken, we envisaged the use of the packet switching model along with gamey elements to provide a perfect synthetic mining experience, that would be accessible to all and authentic with its delivery of coin rewards to the miner user participants.

1.1 Public perception of blockchain mining technology

Distributed ledger technology has the potential to be one of the biggest transformational elements in the expanding digital revolution. The potential applications are varied and its implications reach across almost every industry. However, the premise of blockchain technology, especially in the mind of the mass consumer, is entirely unreachable currently, to the detriment of the movement.

The majority of blockchain projects mostly limit their audiences to early investors or a relatively small group of people with domain specialized knowledge or interests. Even then, most of these projects are either conceptual or in development, where their final practical product remains unproven and details abstract.

1.2 Practical and sustainable application of blockchain technology

Initial Coin Offerings (ICOs) have become a revolutionary and very viable funding model for blockchain based projects. However, while this model portends to facilitate funding opportunities to investors outside of the venture capitalist area of influence, it can create complications for other audiences, where some are deployed in innate bad faith, additional coin sales falter and create avoidable negative models, projects, and bad technology forks associated with them.

With the early world wide web media focus parallel that is currently on cryptocurrency valuations and the ongoing disruption to the financial industry, with inevitable push backs to



follow, innovations in core blockchain technological development have been reduced, instead focusing on the market accessible cryptocurrency space despite its volatility in markets.

Cryptocurrency is still effectively a concept that is above comprehension to the general global consumer, outside of its rudimentary position as a near tradeable commodity and further the population doesn't widely understand the implications of blockchain technology beyond the elementary entry point of this simple trading and investment.

It's clear that new developments in the space will mirror public interest to secure awareness but this will invariably limit blockchain innovation for both additional developments in the core of the technology and with applications that strive to move beyond the rudimentary aspects of exchange commodification.

1.3 Meaningful innovation of blockchain technology via additional layers for consumer accessibility

The new area of smartphone mining being deployed by Packet Mining addresses the concept of digital asset acquisition, an area of significant experimentation that continues to expand. Digital goods, through their implementation in distributed ledgers now have a real-world valuation, with counterparty selling in fiat based currencies and payment schemas being deployed to facilitate global transactions.

However, these initial niche instances represent a currently near immeasurable fraction of total global assets and or in the case of crypto based currencies are limited to equally fractional insignificance. Additionally, there have been numerous examples of large scale exchange hacking events, cheating through phishing and developers negatively influencing the ecosystem and larger economy through deceptive practices.

Digital assets hold however, immense potential, perhaps even societally transforming implications that offer a radically decentralized notion of base exchange. But to date they haven't achieved iterative reliability to be adopted by the mass consumer, even with a new tempo of regulatory regime oversight being actively discussed and in some cases, deployed to the detriment of innovation.

1.4 Central Issuing Authority

When digital assets are created and issued, primarily now as cryptocurrencies, the most rare or popular of them are identified, where the creator in most cases defines a maximum allowable distribution at inception and is prohibited from simply creating additional volumes by virtue of the specific parameters defined in a supporting blockchain. This prevents value diminishment of the digital asset, ensuring the originally defined worth by virtue of defined scarcity is preserved.

1.5 Provider Dependency

The existence of a digital asset is not dependent upon the existence of the issuing authority. If a digital asset is created and the incepting creator ceases to exist, the digital assets remains in existence, however lack of blockchain node availability due to project disinterest can prevent



longer term viability. However, a creator removed from active participation does not preclude secondary platform node support as long as the base code has been distributed.

1.6 Expanding Roles and Function

Physical fiat currencies are widespread as a function of established, generational perceptions on exchange and the modality of popular interfaces, both tangible and digital one side registries for convenient access.

Current digital assets, primarily in cryptocurrencies, can be argued don't serve a specific purpose as yet and are not widespread enough to have a reliable real world function outside of a novelty store of value as with trading cards, works of art or antiques. This is evidenced by the initial interest shown in digital assets like Bitcoin where prior to it becoming a semi-viable means of value exchange, it was retained merely as a novelty storer of possible future value. Most thought that the interest would subside quickly, however the opposite has occurred.

We believe this is in part, due to the increasing functionality that is emerging in the community outside the basic store of value, where divergent projects and new digital asset products and classes are iterating at an increasing rate, that can only be reasonably compared to the initial world wide web, .com explosion of awareness and subsequent gold rush mania, where all comers are attempting to stake a claim.

The only reason any previous attempts at a defined digital asset class have not been successful in circumventing the established paradigm is because of the insignificant user base, a central regulating authority as with PayPal, the base of legacy exchange woven into add-on exchange platforms and the invariable concerns over security, where mass users prefer the notion of insured, safe, reliable storers of value with non-performance recourse.

The size, scope, and long-term viability of digital assets deployed through distributed ledgers and the mining function imbedded in some, will at a future point alleviate mass consumer fears over asset value protection associated with this new unvetted provider dependency, but it doesn't solve it in the long term. At some juncture it is inevitable, a legacy institution or provider will step in and as with fiats, provide a platform exempt layer of authenticity to assuage the trepidations of distributed ledgers being managed and potentially mismanaged by relative unknowns.

At this inflection point, the mass adaptation of digital assets, whether cryptocurrency or not will accede to critical mass and mass viability, where until that point is reached the wild west is still upon us, where we see Packet Mining as the first reach across to mass consumers and their desire to deploy into this unrealized sector of user friendly, accessible, broad based digital asset mining,

Because these inherent problems exist at this nascent stage, people aren't willing to invest in digital assets en mass as yet, outside of the relatively niche cryptocurrency platforms. If digital assets held their value without the unacceptable price volatility the same way fiat currencies do, wider adaptation and a further expanding usage profile would emerge and the envisaged new world of distributed ledger value storing would further flourish.



2. The Product

PacketMining is a blockchain based augmented application and server side code set that allows general consumers to utilize their smartphones to mine for reward coins without the inherent complexity of distributed ledgers and algorithmic decryption as a known aspect.

The mined PAKT coin itself becomes a commodity of demand by virtue of scarcity and the user effort required to ‘mine’ the reward, ensuring that time spent within the environment is both fun and personally beneficial.

Of the 50,000,000 maximum generated PAKT coins, 40,000,000 or 80% will be allocated for the rewards from the app based mining process. The mining allocation will be vested at an annual rate of 4,000,000 PAKT coins over a ten year or one hundred and twenty month term. Further, then approximately 333,333 PAKT coins will be allocated for monthly mining rewards, where the amount distributed/rewarded is determined by the mining app mechanics to ensure unpredictability and anti-method mining.

Immediately at reward and at the end of the ten year term, the coins remain freely exchangeable and will stand as the world’s first example of distributed packet switched coin mining layered on top of a blockchain based distributed ledger.

The smartphone application and mining server synthetic mining process is based on a fixed algorithm with values embedded in a blockchain contract that cannot be modified once executed. However, multiple revisions of the mining algorithm will be deployed in beta testing to ensure the best UX outcome and the adhesiveness of the platform in the consumer realm. PacketMining may or may not and reserves the right to select either option, when it comes to disclosing the actual end to end algorithm to be implemented on the mining server application interface.

2.1 Mining Cycle Input Factors

The Mining Cycle utilizes a combination of variables that are processed to activate the mining process and the resulting coin reward that is written to the PAKT blockchain. The base characteristic for algorithm interpretation is the “Miner Class ID” where there are four classes defined:

- **Seed Miner:**
The PacketMining seed round participants tied to their packetmining.com login credentials and then to their app id/IMEI/telno. This ID is transferrable and adds a Class 1 premium to mining cycle reward generation calculation.

- **Pre-ICO Miner:**
The PacketMining pre-ICO participants tied to their packetmining.com login credentials and then to their app id/IMEI/telno. This ID is transferrable and adds a Class II premium to mining cycle reward generation calculation.



- **ICO Miner - SoftCap:**
The PacketMining ICO Miner SoftCap participants tied to their packetmining.com login credentials and then to their app id/IMEI/telno. This ID is transferrable and adds a Class III premium to mining cycle reward generation calculation.
- **ICO Miner - HardCap:**
The PacketMining ICO Miner HardCap participants tied to their packetmining.com login credentials and then to their app id/IMEI/telno. This ID is transferrable and adds a Class IV premium to mining cycle reward generation calculation.
- **General Miner:**
The general miner acquires their packetmining.com account after the ICO HardCap expiration and receives no additional mining cycle reward generation calculation premiums.

2.2 Mining Cycle iOS/Android Application fundamentals

- Zulu clock permanently displayed in the top right.
- Active Mining Clock (AMC) permanently displayed top left.
- Countdown to next Mining Cycle (MC) displayed at completion of MC.
- Miner registers to next MC within 300 second window.
- MC has a 3,300 second duration.
- During the MC, Miner will be mandated to stay attentive and enter responses to Miner response tests (MRT):
Captcha identification –or-
Picture identification –or-
Password –or-
Simple trivia multiple choice –or-
Human validation question test.
- Incorrect answer kicks the Miner out of the current MC and his coin reward eligibility is reset to zero for the current MC.

2.3 Mining Cycle Fundamentals

- Mining Chain (MCH) is list of Miners at the beginning of the MC ordered by registration date and class premium.
- List determines Miners falling off the mining cycle.
- List compiles Miners completing full mining cycle.

2.4 Mining Cycle Metrics

- List of MC starting Miners, determines Mining String (MS) size in Bytes.
- Each Miner must pass the entire MS to the next Miner in the MCH.
- Mining app displays the incoming block of the MS and its origin Miner.
- Mining app displays the outgoing block of the MS and its destination Miner.
- Miners who fall out of the MC are not required to transmit/receive MS, but its size remains constant through the MC.
- A time premium may be awarded to the MC pool of Miners for every complete transit of the MS through the pool list (PL).



- As the Miner is unaware of their sequence in the PL they must be attentive for the incoming MS, its re-transmission and a possible MRT authentication check. Not all re-transmissions will require authentication to ensure multiple MS transits through the PL can occur.
- When an incoming MS pushes for a MRT validation input, it must be correctly input or the Miner is removed from the MC.

2.5 Mining Cycle Growth Management

As PacketMining technology grows in popularity the number of active Miners in an MC will also expand. To accommodate larger PL's, the mining server algorithm (MSA) segments pools of multiple miners into Miner Blocks (MB) to ensure the MS can be passed gamely amongst the miner selected to represent the MB. They are referred to as the Lead Miner of the Block (LMB)

All Miners in the MB will still have to execute several MRT's to remain active for rewards even though they may not execute an MS receive/transmit during the MC. A failed MRT by the LMB kicks the individual Miner from the MC but the rest of the Miners in the MB continue in the MC as the MS will pass more than once through the PL. Each designated MB will have a new LMB selected each cycle.

2.6 Coin Eligibility

- Each completed MC rewards a coin allotment to successful Miner participants.
- 40,000,000 total PAKT coins will be hard allocated for mining reward distribution over an exact ten year period.
- 4,000,000 PAKT coins will be hard allocated every year for mining rewards.
- 333,333 PAKT coins will be hard allocated every calendar month for mining rewards.
- There are 24 daily MC's that will draw from the monthly allocation. Synthesized as Mining Properties (MP), each daily fictional location has a different reward structure to add more gamey feel to the mining process and encourage participation.
- The MSA divides the monthly designation to ensure consistent delivery of the 333,333 coins with the feel of randomness. So the number of coins awarded per 24 hours is not 333,333 PAKT Coins divided by 28, 30 or 31 days.
- Number of mining cycles (MC) per day is a consistent 24 through the distribution of the 40,000,000 Coins.
- Once the 40,000,000 PAKT Coins are distributed by the mining server and written to the Packet Mining blockchain, no additional PAKT can or will be created.
- Any technical downtime of the MSA or the hosting of the MSA that occurs during a single or multiple MC period will force those mining reward allocations to be redistributed in the same calendar month. The developers hope to avoid any downtime, but invariably this may occur where updates on platform status are posted on the www.packetminig.com homepage.

2.7 MC Distribution Calculation

- The fractional coin awards are distributed amongst the users that complete a full MC.
- Each Miner with a complete for the MC receives one point.
- Each Miner or LMB that responds the quickest to the MRT receives an additional point.
- The Miners in the complete MC are ordered by their sequential registration dates.



- Any of the first original thousand Miners that are present in the MC are awarded an additional point. Subsequent Miners are sequentially grouped into thousand Miner loyalty award pools or their LMB's.
- One randomly selected sequential group of one thousand Miners or an LMB receives one additional point each.
- One randomly selected sequential group of one thousand Miners or an LMB receives two additional points each.
- One randomly selected sequential group of one thousand Miners or an LMB receives three additional points each.
- One randomly selected sequential group of one thousand Miners or an LMB receives four additional points each.
- One randomly selected sequential group of one thousand Miners or an LMB receives five additional points each.
- One randomly selected sequential group of one thousand Miners or an LMB receives 10 additional points each.
- One randomly selected sequential group of one thousand Miners or an LMB receives 15 additional points each.
- The total MC points awarded are calculated based on the number of Miners in the MC.
- One Miner will receive $x(\text{tbd})$ points relative to total MC Miners as a nugget reward
- One Miner will receive $x(\text{tbd})$ points relative to total MC Miners as a vein reward
- One Miner will receive $2x(\text{tbd})$ points relative to total MC Miners as a large nugget reward
- One Miner will receive $2x(\text{tbd})$ points relative to total MC Miners as a large vein reward
- Each Miners total point award is calculated based on the point award criteria
- The fractional coin award is allotted to the individual Miners PacketMining wallet and is added to the PacketMining blockchain.
- 3% of the total MC PAKT coin award is distributed to www.PacketMining.com to account for mining server overhead and blockchain node management.
- www.PacketMining.com receives 3% of each transaction conducted in the wallet transfer process in addition to also account for transactional overhead.
- The specific PAKT coin award distribution is a proposed model, where PacketMining reserves the right to make modifications to the MC reward calculation to spur greater user experience and broader distribution with Miner notification twenty-four hours before implementation. A flat predictable reward model may be too boring to sustain interest and further 'lottery' like elements may be implemented.

2.8 Coin Rewards Fundamentals

- Fictional PacketMining Company has a new mining area the 'Coinologist' discovers and prospects every month.
- Each new area is a fictional location that spawns the variables of Coin Density, Regional Development Bonuses and Labour Premiums etc., to develop total available PAKT coin amount for the Mining Report.
- The MSA inputs the secret variables from the Mining Report with gamey consideration and plans out the MC available rewards for the month.



- The monthly cumulative PAKT coin distribution is not published, however, can be derived from analysis of the PAKT blockchain, where it could reasonably be expected that approximations on distribution could be predicted in the last week of every month, which may be a consideration in the MSA.

2.9 Mining Fraud Countermeasures

To maintain PacketMining platform integrity imperative use of both smartphone device IMEI number, Manufacturer Serial No., randomly deployed user presses, MRT's, mobile number authentication to ensure a "Factory Mining" operation cannot be deployed and cheat the intent of the platform to be free of a mining arms race.

Additional countermeasures to be developed to ensure platform integrity include possible random facial identification, thumbprint identification and voice modulation recognition. It is the intent of the development team to ensure the platform remains accessible and more importantly viable to individual users and does not birth a new class of mining farms where capital deployment into hardware pools near disqualifies the individual users.

The development team reserves the right to suspend any user it suspects of modifying the app client code for the purpose of deployment into a development environment that attempts to add multi-mining, farm mining or non-human mining.

An open PAKT coin reward is offered for any knowledge of persons or groups involved in attempting to negatively impact the intent of this platform and its deployment of fun, accessible mining through software and hardware manipulations outside of single usage.

The development team believes that it has incorporated sufficient countermeasures in its software development plan to ensure platform integrity and prevent abuse from mass non-human mining interactions.

Conclusion: Let the People Mine!

Our platform development team strongly believes in the potential of blockchain technology and all of the resulting forks and projects. We are fully confident that mass consumer penetration is close and teams with innovative products that address the existing momentum can successfully transition into the mainstream.

It's an accessible user experience and removal from a code centric requirement that can catapult PacketMining into the Tier One blockchain application class that will enable widest possible adoption. We will constantly push to communicate these values of accessibility and fun on this initial PAKT coin and with any further additions to our blockchain.

PacketMining will be the world's first true smartphone coin mining platform for the blockchain, built on the premise of distributed packet switching. It will make the blockchain concept approachable for the everyday consumer and bring us a step closer to widespread deployment of cryptocurrencies and blockchain technologies.

Have fun out there and get mining!

