



# ROVER COIN

Pos + MN + PoW

ON THE GAME

## INTRODUCTION TO CRYPTOCURRENCY

**The blockchain is an undeniably ingenious invention - the brainchild of a person or group of people known by the pseudonym, Satoshi Nakamoto. But since then, it has evolved into something greater. By allowing digital information to be distributed but not copied, blockchain technology created the backbone of a new type of internet. Originally devised for the digital currency, Bitcoin, the tech community is now finding other potential uses for the technology.**

**Cryptocurrencies are digital assets designed to work as a medium of exchange that uses cryptography to secure its transactions, to control the creation of additional units, and to verify the transfer of assets. As opposed to conventional money transfer and banking systems in which centralized control is owned by a single party, cryptocurrency uses a decentralized structure.**

**The control of each cryptocurrency works through a blockchain, which is a public transaction database. The blockchain functions as a distributed ledger, making counterfeit cryptocurrency impossible.**

**Cryptocurrencies have emerged as the latest brave market in the trading world. These trading markets are relatively young and thus full exploitation has not yet been achieved. The fact that some coins like Bitcoin can rise by 10% in a single day signifies the need for other stable coins to join the**

market. The tender age cryptocurrency in the trading world has prevented the established trading houses and only left the young companies to invest. The market capitalization for cryptocurrency stood at \$300 bn and still growing. This further signifies the availability of opportunities for young traders to venture in the market and make profit.

The concept of decentralized digital currency, as well as alternative applications like property registries, has been around for decades. The anonymous e-cash protocols of the 1980s and the 1990s were mostly reliant on a cryptographic primitive known as Chaumian Blinding. Chaumian Blinding provided these new currencies with high degrees of privacy, but their underlying protocols largely failed to gain traction because of their reliance on a centralized intermediary. In 1998, Wei Dai's b-money became the first proposal to introduce the idea of creating money through solving computational puzzles as well as decentralized consensus, but the proposal was scant on details as to how decentralized consensus could actually be implemented. In 2005, Hal Finney introduced a concept of reusable proofs of work, a system which uses ideas from b-money together with Adam Back's computationally difficult Hashcash puzzles to create a concept for a cryptocurrency, but once again fell short of the ideal by relying on trusted computing as a backend. In 2009, a decentralized currency was for the first time implemented in practice by Satoshi Nakamoto, combining established primitives for managing ownership through public key cryptography with a consensus algorithm for keeping track of who owns coins, known as

**“proof of work.” The mechanism behind proof of work was a breakthrough because it simultaneously solved two problems. First, it provided a simple and moderately effective consensus algorithm, allowing nodes in the network to collectively agree on a set of updates to the state of the Bitcoin ledger. Second, it provided a mechanism for allowing free entry into the consensus process, solving the political problem of deciding who gets to influence the consensus, while simultaneously preventing Sybil attacks. It does this by substituting a formal barrier to participation, such as the requirement to be registered as a unique entity on a particular list, with an economic barrier - the weight of a single node in the consensus voting process is directly proportional to the computing power that the node brings. Since then, an alternative approach has been proposed called proof of stake, calculating the weight of a node as being proportional to its currency holdings and not its computational resources. The discussion concerning the relative merits of the two approaches is beyond the scope of this paper but it should be noted that both approaches can be used to serve as the backbone of a cryptocurrency.**

## **INTRODUCTION TO ROVER COIN**

**Rover Coin (ROE), is an open-source, peer-to-peer, digital currency, designed and engineered for maximizing decentralization, opportunities for earnings, diversified network and hybrid systems. Rover Coin is a PoS/Masternode**

**based cryptocurrency that provides a secure purchase experience in gaming industry. It's a hybrid coin that provides reward for Proof of staking, Masternodes and for Proof of Work as well.**

**Proof of work helped to give birth to Nakamoto's major breakthrough, however the nature of proof of work means that the cryptocurrency is dependent on energy consumption, thus introducing significant cost overhead in the operation of such networks, which is borne by the users via a combination of inflation and transaction fees. As the mint rate slows in Bitcoin network, eventually it could put pressure on raising transaction fees to sustain a preferred level of security. One naturally asks whether we must maintain energy consumption in order to have a decentralized cryptocurrency? Thus it is an important milestone both theoretically and technologically, to demonstrate that the security of peer-to-peer cryptocurrencies does not have to depend on energy consumption. All coins and confirmations are verified through Proof of work or Mining. They you layer on the proof of stake chain. Where blocks are generated from the coins you store in your wallet.**

**Simply by storing them for 4 hours then keeping your wallet open and unlocked you receive a fixed rewards of these coins in the block as a reward while the coins used are staked and unavailable until the block matures. These 2 chains work so well together they can confirm transactions across the two and speed up the network as a whole. This also adds another layer of security. One cannot attack just the Proof of work**

chain you need to attack or control both chains simultaneously. Which means You are still required to have 51% of the network hashrate as well as a minimum of 20% stake power requires one to invest in a substantial amount of the currency they are trying to devalue. The RoverCoin PoS method of work based on BlackCoin 2.0 PoS protocol with fixed PoS rewards per block. With the PoS 2.0 protocol possible attack vectors are reduced to a minimum and the incentive to support the network by having a full node running continuously is clearly increased. This will allow RoverCoin and PoS to continue to scale for mass adoption while plugging and mitigating potential risks.

A Cryptocurrency is a digital asset which is designed to work as a medium of exchange that utilizes cryptography to secure its transactions, in order to control the creation of additional units, and to verify the transfer of assets. Crypto currency uses a decentralized structure as opposed to conventional money transfers and banking systems in which centralized control is owned by a single party. The control of each cryptocurrency works through a blockchain, which is a public transaction database. The blockchain functions as a distributed ledger, making counterfeit cryptocurrency impossible.

Bitcoin, which was first created in 2009, was the first decentralized cryptocurrency. Since then, numerous other cryptocurrencies have been created. These are frequently called “altcoins”, a portmanteau of “alternative” and “coin”. The altcoin market is particularly exciting because there is still so much room for innovation and undiscovered uses for cryptocurrency. Rover

**Coin is an altcoin introduced to give unique instant payment Solution for Payments related to Gaming Sector. Rover Coin will also help you the Gamers to be Anonymous.**

## **GAMING INDUSTRY**

**Global Gaming Market The global gaming market is experiencing explosive growth, reaching US\$108.9 BN in 2017 and a projected US\$128.5 BN by 2020. Rover is revolutionizing the gaming industry by harnessing the power of the blockchain in the gaming market. Rover is the cryptocurrency with an authentic purpose for gamblers and gamers to earn, trade and bet with cryptocurrency.**

**Online betting is a large, fast growing and segmented market. The development and evolution of new technologies have made a considerable impact on the operation of, and interaction between, every sector of the global economy. The impact upon the betting industry has been no different in that regard, opening new product platforms and access to a wider consumer base due to the growth of new technologies. Online gambling on computer and mobile devices is considered the growth driver of the market.**

**Mobile casino, live betting and mobile betting are expected to have the biggest growth potential in terms of gross gaming revenue (stakes less winnings) over the next twelve months and are also anticipated to have big potential for the following years.**

**Rovercoin will make it possible for players to use ROE for their favorite games and as well as online and traditional casino games. Players will use ROE for purchasing game credits as well as in game items.**

## **PROOF OF WORK**

**A Proof-of-Work (PoW) system (or protocol, or function) is an economic measure to deter denial of service attacks and other service abuses such as spam on a network by requiring some work from the service requester, usually meaning processing time by a computer. We have POW Rewards on ROE Based on the number of blocks.**

### **Algorithm X11**

**Algorithm X11 is a widely used hashing algorithm created by Dash core developer Evan Duffield. X11's chained hashing algorithm utilizes a sequence of eleven scientific hashing algorithms for the proof-ofwork. This is so that the processing distribution is fair and coins will be distributed in much the same way Bitcoin's were originally. X11 was intended to make ASICs much more difficult to create, thus giving the currency plenty of time to develop before mining centralization became a threat. This approach was largely successful; as of early 2016, ASICs for X11 now exist and comprise a significant portion of the network hashrate, but have not resulted in the level of centralization present in Bitcoin. X11 is the name of the chained proof-of-work (PoW) algorithm that was introduced in Dash**

(launched January 2014 as “Xcoin”). It was partially inspired by the chained-hashing approach of Quark, adding further “depth” and complexity by increasing the number of hashes, yet it differs from Quark in that the rounds of hashes are determined a priori instead of having some hashes being randomly picked. The X11 algorithm uses multiple rounds of 11 different hashes (blake, bmw, groestl, jh, keccak, skein, luffa, cubehash, shavite, simd, echo), thus making it one of the safest and more sophisticated cryptographic hashes in use by modern cryptocurrencies. The name X11 is not related to the open source GUI server that provides a graphical interface to unix/ linux users.

## PROOF OF STAKE

Proof of Stake (PoS) is a category of consensus algorithms for public blockchains that depend on a validator’s economic stake in the network. In proof of work (PoW) based public blockchains (e.g. Bitcoin and the current implementation of Ethereum), the algorithm rewards participants who solve cryptographic puzzles in order to validate transactions and create new blocks (i.e. mining). In PoS-based public blockchains (e.g. Ethereum’s upcoming Casper implementation), a set of validators take turns proposing and voting on the next block, and the weight of each validator’s vote depends on the size of its deposit (i.e. stake). Significant advantages of PoS include security, reduced risk of centralization, and energy efficiency.

**In general, a proof of stake algorithm looks as follows. The blockchain keeps track of a set of validators, and anyone who holds the blockchain's base cryptocurrency (in Ethereum's case, ether) can become a validator by sending a special type of transaction that locks up their ether into a deposit. The process of creating and agreeing to new blocks is then done through a consensus algorithm that all current validators can participate in.**

**In chain-based proof of stake, the algorithm pseudo-randomly selects a validator during each time slot (eg. every period of 10 seconds might be a time slot), and assigns that validator the right to create a single block, and this block must point to some previous block (normally the block at the end of the previously longest chain), and so over time most blocks converge into a single constantly growing chain.**

**The Proof of Stake (PoS) concept states that a person can mine or validate block transactions according to how many coins he or she holds. This means that the more ROE owned by a miner, the more mining power they would gain. We have PoS rewards up to 25% of the rewards.**

## MASTERNODES

**A Masternode is simply a node that keeps a full copy of the blockchain in-real time. It is active 24/7, and is always interacting with other nodes to make a fully stable and performing decentralized network.**

**Running a Masternode helps the network throughout, as there will always be a stable node, with multiple connections around the world, running. As a reward for hosting one of these Masternodes, ROE will be paid to your wallet on a recurrent basis.**

**Masternodes are a section of the infrastructure of a certain group of cryptocurrencies. They are computer servers and provide services to cryptocurrency users. Masternode coins were developed so as to give the coin owners more control and more yield. One way that Masternode generates is yield is by offering services to the crypto currency infrastructure.**

**Rover Coin community is to manage and run the proposals that helps in stabilizing and increasing the value of a currency if the governance system is introduced. In Masternodes, the proposals can be made by any person unlike other coins who charge a proposal fee and this makes Masternode a favorite among investors. After proposals are submitted, a vote is made by master node holders and proposal is voted in. The Masternode system utilizes people's competitiveness and creativity to get ideas of improving the coin. The best ideas are generated from proposals submitted by coin holders. These ideas improve the currency value which in turn increase the block reward.**

**Investing in Masternode coins gives you the ability of not only being an investor, but part of the decision makers in shaping the coin advancement. Owning own gives a voice to an investor and makes it more than just money. This is done through submitting proposals. The foundation of Masternodes is stable and has long term values at the core of the infrastructure.**

**The founding investors have committed their money for a long term making it stable and increases trust among investors. Investors get capital gains by just running the Masternode services. On top of that, investors are paid in that coin as rewards from each block found.**

**Full nodes are servers running on a P2P network, that allow peers to use them to receive updates about the events on the network. These nodes require significant amounts of traffic and other resources that carry substantial cost. As a result, on the Bitcoin network a steady decrease in the amount of these nodes has been observed for some time and as a result block propagation have been upwards of 40 seconds. Many solutions have been proposed such as a new reward scheme by Microsoft Research and the Bitnodes incentive program. These nodes are very important to the health of the network. They provide clients with the ability to synchronize and quick propagation of messages throughout the network.**

**The availability of a stronger community guarantees the long-term sustainability of the crypto project. This in turn ensures that energy is focused on the project's long-term future**

**instead of pump and dump cycles.**

**The Rover Coin (ROE) is a decentralized CryptoCurrency and the network of Masternodes, Staking and Proof of work without superfluous control and intermediaries/gatekeepers with nearly 95% pure Block reward phase and ensures lightning fast and secured transaction for less fees, It will also support multi-wallets, encrypted messaging, stealth address for complete anonymity and provide a reduced amount of confirmations, .Masternodes, POS and POW are constantly connected to the network to achieve faster transactions. These full nodes run 24/7 and require collateral of 10,000 ROE. The Master node owner will be rewarded up to 95% of the block rewards.**

## SPECIFICATIONS

Coin Name **Rover Coin**

Ticker **ROE**

Coin Type **POW + POS + MasterNode Based Coin**

Block Size **3MB**

Total Coin **60 Million**

Masternode Collateral **10000**

Block Time **90 Secs (Approx 960 Block/Day)**

Reward Per Block **32**

Block (Reduction) Halving **-16% / Year**

Premine **5%**

First PoS Block **351**

Last PoW Block **500000**

Block Reward Distribution **On Table**

Instantx **3000**

Minimum Stake **8 Hours**

Coin Maturity **101 Blocks**

## BLOCK REWARDS STRUCTURE

Block	PoS	MN	PoW
1-100	-	-	-
101-350	No PoS	No PoS	6
351-10000	5%	95%	5
10001-25000	8%	92%	4
25001-50000	12%	88%	3
50001-100000	16%	84%	2
100001-500000	20%	80%	1
500001-END	25%	75%	0

## DARKSEND

We believe it is important to have a standard trust-less implementation for improving the privacy of it's users in the reference client that provides a high degree of privacy. Other clients such as electrum, Android and iPhone will also have the same anonymity layer implemented directly and utilize the protocol extensions. This allows users a common experience anonymizing funds using a well understood system. Darksend is an improved and extended version of the CoinJoin. In addition to the core concept of CoinJoin, we employ a series of improvements such as decentralization, strong anonymity by using a chaining approach, denominations and passive ahead-of-time mixing. The greatest challenge when improving privacy and fungibility of a crypto-currency is doing it in a way that does not obscure the entire blockchain. In Bitcoin based crypto currencies, one can tell which outputs are unspent and which are not, commonly called UTXO, which stands for unspent transaction output.

This results in a public ledger that allows any user to act as guarantor of the integrity of transactions. The Bitcoin protocol is designed to function without the participation of trusted counterparties, in their absence, it is critical that auditing capabilities remain readily accessible to the users through the public blockchain. Our goal is to improve privacy and fungibility without losing these key elements that we believe make a successful currency. By having a decentralized mixing service within the currency we gain the ability to keep the

**currency itself perfectly fungible. Fungibility is an attribute of money, that dictates that all units of a currency should remain equal.**

**When you receive money within a currency, it should not come with any history from the previous users of the currency or the users should have an easy way to disassociate themselves from that history, thus keeping all coins equal. At the same time, any user should be able to act as an auditor to guarantee the financial integrity of the public ledger without compromising others privacy. To improve the fungibility and keep the integrity of the public blockchain, we propose using an ahead-of-time decentralized trustless mixing strategy. To be effective at keeping the currency fungible, this service is directly built into the currency, easy to use and safe for the average user.**

## **STEALTH PAYMENTS AND STEALTH ADDRESS**

**Stealth payments is an anonymity technique that protects the privacy of the recipient. The concept was invented Peter Todd based on earlier work by ByteCoin, and with feedback from other developers. It's a powerful tool for allowing one to accept Rover coins using a public RoverCoin address while preventing passive observers from knowing your transaction history. A Stealth Address is a type of RoverCoin address and related scriptPubKey/transaction generation scheme that allows payees to publish a single, fixed, address that payors can send**

**funds efficiently, privately, reliably and non-interactively. Payors do not learn what other payments have been made to the stealth address, and thirdparties learn nothing at all. (both subject to an adjustable anonymity set). SX provides commands for working with stealth transactions, and for understanding the mechanics behind them. A stealth address consists of a scan key and optional spend keys. A single spend key is useful for wallets that don't wish to decrypt constantly to check for received payments which can compromise security. The scan key allows wallets to check for received payments but not redeem the secret key and to recreate the stealth address.**

**Receiver generates a an address and a private secret and then sends this address to someone who he wants payment from. Sender uses the address and a “nonce” to generate the address he/she can send funds to. Sender communicates the nonce to the receiver and by using this nonce and the secret key generated earlier he/she can unlock the address with the funds.**

## **ROAD MAP**

### **Q1 2018 - Research and Development**

**We researched and developed a hybrid coin in Blockchain technology with Masternode+POS+POW to provide payment solutions for games. websites/applications and developed our Blockchain based on that to provide anonymous payment solutions in the gaming sector.**

**We have released Linux Windows and Mac OS wallets, we have also completed our website design and development.**

**Listing on ranking sites Such as Mnrank.com and Masternodes. online Will be Completed on Q1 2018**

**We will list the coin on exchange such as Crypto-Bridge and Coin Exchange on Q1-2018**

#### **Q2-2018**

**Listing on Cryptopia exchange and masternodes.pro ranking website**

**We will release iOS and Android wallets in this quarter**

#### **Q3 2018**

**Planning to release web wallets and aim to list on HitBtc in this quarter. We will also begin working with gaming websites to accept ROE as a payment method for online games**

#### **Q4 2018**

**We will start a website with our own set of games that accepts ROE as a payment method**

#### **Q1 2019**

**We aim to start working with Android applications individually to accept ROE as a payment method for the concerned games.**

## **PREMINE**

**ROE has 5% of Premine that will be used for Airdrops, Bounties and listings on exchanges, to start the gaming website which will accept ROE as a payment method, to make ROE as a payment solution on gaming websites and applications, to develop web wallet, Android/IOS wallets and much more which is listed on the roadmap in order to maintain the ROE.**

## **CONCLUSIONS**

**The Rover Coin will be a currency for payments related to gaming. The gaming websites which Accept ROE as a payment gateway will become a game changer. Accepting the coins on gaming websites and applications will take ROE to the next level of payment modes in the gaming sector. We will work hard to achieve our goals with success.**