Smart Contract Oracles

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***Abstract*—The abstract goes here.**

I. Introduction

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II. Methodology

III. Smart Contracts

A. Priciples and Applications

Smart Contracts are scripts, which translate contract clauses into software code and execute them autonomously. Once implemented, these scripts cannot be manipulated, ensuring that the self-enforcement process will proceed according to the predefined rules in a deterministic way. Smart Contracts can ensure an efficient contracting process and reduce transactions costs by replacing the trusted third party, like courts or a notary [**?**] [**?**].

Smart Contracts can be used for many different applications. An easy example would be a website which is sold from one contractual party to another. As soon as the purchaser pays price, which was stored in the Smart Contract, it will automatically transfer the property rights of the webiste. If physical objects are included, even a car rental service can be controlled by a Smart Contract. The script would watch if the payments occur in the agreed period and in case the borrower is overdue, the code will block the electronic car key. [**?**] [**?**]

B. Blockchain

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1) Technical Structure: A blockchain is a distributed data structure shared by the nodes of the underlying peer-to-peer network. The name consisting of block and chain characterizes the structure and functionality(??). Blocks are identified by a cryptographic hash and each block has a reference to the block before via the hash. These hashes create a link between the blocks, thus a chain is built up. For of a blockchain there is no central authority needed. It is a decentralized peer-to-peer network without a trusted intermediary. Instead, a blockchain relies on cryptography. Each node has a pair of keys: a private and a public key. The private key is for signing the node's own transactions and with the public key the node can be addressed in the network.

Blockchains enable trustless networks. Transactions between nodes can be executed without one node trusting the other node. A blockchain network is formed by nodes operating on the same blockchain. [**?**]

C. Data Feeds and Processing

IV. Oracles

V. Conclusion

The conclusion goes here.

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References