http://hephaestus.nup.ac.cy

School of Information Sciences

Conference papers

2020-07-20

A Decentralized Voting Mechanism: Engaging ERC-20 token holders in decision-makin

Christodoulou, Panayiotis

IEEE

http://hdl.handle.net/11728/11704

Downloaded from HEPHAESTUS Repository, Neapolis University institutional repository

A Decentralized Voting Mechanism: Engaging ERC-20 token holders in decision-making

Publisher: IEEE

Cite This **PDF**

Panayiotis Christodoulou; Klitos Christodoulou

Abstract:

This paper presents a Blockchain-based voting mechanism that has the potential to disrupt current voting systems and fuel the development of decentralized governance. More specifically, the paper presents a study on the design and deployment of a Solidity smart contract that can interact with any Ethereum-based token (ERC-20) in order to help decentralized organizations to run public voting campaigns while at the same time engaging tokens holders in decision making. The use case scenarios outlined in the paper demonstrate with success the effectiveness of the proposed approach.

Published in: 2020 Seventh International Conference on Software Defined Systems (SDS)

Date of Conference: 20-23 April 2020

Date Added to IEEE Xplore: 20 July 2020

ISBN Information:

INSPEC Accession Number: 19810230

DOI: 10.1109/SDS49854.2020.9143877

Publisher: IEEE

Conference Location: Paris, France