

2020-07-20

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

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](https://doi.org/10.1109/SDS49854.2020.9143877)

**Publisher:** IEEE

**Conference Location:** Paris, France