

Towards a Decentralized Publication Platform with Authors Incentivized by Blockchain Technology

CS Wanigasooriya^{1#}, JJRS Fernando¹, SCM De Silva¹ and M Sirisuriya¹

¹Department of Computer Science, General Sir John Kotelawala Defence University, Sri Lanka #36-se-0004@kdu.ac.lk

Concerns regarding fairness, quality, performance, cost, and accuracy arise when science is published, and peer-reviewed. The Open Access movement has failed to deliver all its promises, and intermediaries' publishers can still enforce regulations and profit concentrations. Existing publication platforms have several serious flaws, such as rather than encouraging extensive knowledge sharing, access to publications on publisher-owned platforms is typically charged. Furthermore, most present publication systems are prone to inefficient peer review since reviewers are not properly compensated for delivering high-quality reviews. A decentralized publication system for open research using upcoming distributed technologies like Blockchain creates transparent governance. In addition to a thorough analysis of the methods, resources, and strategies put out in the literature to deal with the problems brought on by the development of the proposed system, we propose an application that takes advantage of the Ethereum blockchain to address all these issues. The system promotes peer review and develops its own reputation ecosystem as a substitute for the dominant prestige structure now in existence in academic publications.

Keywords: decentralized publication platform, Blockchain, open access, ethereum