

Combating Private Blockchain Fraud: A Virtual Reality & Artificial Intelligence Model

Ehi E. Aimiwu
eeaimiwu@campbellsville.edu
Information Technology Management
Campbellsville University,
Campbellsville, KY. USA

Abstract

One of the problems hindering the adoption of blockchain today is that managers are insecure about financial security. Business secrets being stolen by competitors in both public blockchain and private blockchain discourages public participation and data transparency, which managers control, and can lead to fraud if management manipulates transaction data for individual gain (Wang & Kogan, 2018). The aim of this literature review is to propose a Virtual Reality (VR) and Artificial Intelligence (AI) model, which can be used to combat private blockchain fraud without compromising confidentiality and transparency. Research shows that VR platforms that use blockchain technology have been instrumental in the music, gaming, hotel, copyright, and property industries. Also, AI is helpful in analyzing huge data in real time and using Machine Learning (ML) logic from expert systems to prevent fraud through clustering, classification, nearest-neighborhood, and statistical methods. Data mining techniques, like class imbalance, the Bayes Network, and forest tree are also useful for upgrading private blockchain technology with AI protocols within the protocol level in order to capture the digital location of the fraudsters in real time for VR verification later. This should discourage private blockchain managers from fraud and enable private blockchain to become more trustworthy for the general public, because confidentiality is compromised by VR only to identify fraudulent private blockchain managers.

Keywords: Artificial intelligence, Blockchain, Fraud, Hybrid Intelligence, Security, Virtual Reality

An updated manuscript may be found at <https://jisar.org>