Abstract

Blockchain technology can be used to solve many educational problems and can help educators as well as learners to monitor the learning outcomes. The data can be stored securely and tamper proof format when it’s stored onto the blockchain network. The Blockchain for Education platform helps us to make the tamper-proof certificates and their correct and the overall permanent allocation of these certificates to learners, as well as verification of certificates. It can reduce the overall frauds and tampering of the degrees and certificates. Here smart contracts can be designed and deployed on to the Ethereum blockchain that can be designed using the solidity programming language. Blockchain can be applied to private, public and consortium sectors depending upon the usage and the scope of the blockchain. Education system can take benefit of this scalability of the blockchain and can be effectively useful in the

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**Index Terms**

Computer Science  
Information Systems

**Keywords**

Blockchain, Ethereum, Distributed ledgers, Smart contracts, Solidity, POW, Consensus.