

Decentralized Secure Student Achievements Platform using Blockchain

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Abstract: *In an increasingly digital world, managing, verifying, and sharing student achievements is critical for academic institutions, employers, and students themselves. Traditional methods of managing student portfolios, such as paper certificates or centralized databases, are prone to issues like forgery, loss, and inefficiency. This project proposes a blockchain-based solution for managing student achievement portfolios that enhances security, transparency, and verifiability.*

Certificates play a crucial role in validating an individual's skills and knowledge, especially in academic and professional settings. However, the credibility of certificates in a college environment is often undermined by issues such as counterfeiting, misuse, and improper storage. To address these challenges, a blockchain-based document verification system can be implemented. Blockchain's immutability ensures the authenticity and integrity of certificates, making it an ideal solution for secure verification and issuance. Additionally, the system will allow students to register for extracurricular activities such as upcoming events, exhibitions, seminars, hackathon, and competitions, and automatically generate certificates upon completion.

This enhances both student engagement and the credibility of certifications, providing a robust and secure platform for managing and verifying academic and extracurricular achievements.

Keywords: Blockchain, verification, issuance, digital certificate, extracurricular activities, events, student registration