Blockchain-based educational certificates

Rujia Li
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Introduction of Team

1. Cryptographic protocol design
2. Project architecture and development

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Msc Advanced

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Msc

1. Front-end web development
2. Publicity website design and video production
1. Fake diploma problem
Fake diploma problem

- Fake Diploma UK: GBP £161.00
- Fake UK Transcripts: GBP £161.00
- United Kingdom Diplomas and Transcripts - College and University: GBP £306.63
- Fake City and Guilds Certificate: GBP £231.38
- Fake GCSE Certificate: GBP £209.54
We proposed an innovative solution to solve the authentication of certificates

Using cryptographic protocols and blockchain technology

More secure, more private and harder to forge
2. Blockchain and Bitcoin
What is Bitcoin?

Bitcoin is a decentralized virtual currency and a payment system based on blockchain and a peer-to-peer network.
Transaction structure

From: Bob
To: Alice (pseudonymous address)
How Much: 10
Coin From: 1
Signature: XXXXXXXXXXXX
Receipt: “borrow from you in Sunday”
3. Get started with our project
BLOCKCHAIN-BASED EDUCATIONAL CERTIFICATES

University of Birmingham

Block Chain Laboratory
4. Impact of the project
Real life impact of our project
1. Using the blockchain technology to protect the authenticity of the university’s certificates.

2. Beyond our project, in the near future, every agreement, every process and every payment would have a digital record and signature that could be identified, validated, stored, and shared.
THANK YOU