Ali Pashmgaran

📞 09370454080
✉ apg.ali2019@gmail.com
🐙 https://github.com/aliapg2019

Education

bachelor's degree   *International University of Imam Reza*
Blockchain labratory of Movahedian professor   *2019-09 – Present*

Work Experience

EXMadule   *2022-10 – 2023-01*
Novin Exchange   *Mashhad, Iran*

- NFT Marketplace (with ERC721 standard)
- NFT Marketplace (with ERC1155 standard)
- Storing Users Account on BlockChain

Project

NFT Marketplace   🐙 *https://github.com/aliapg2019/nft-market*

• The smart contracts of this project are written in Solidity and were tested and deployed using the Hardhat framework on the Ganache test network.
• Next.js framework has been used for implementing the frontend.
• This project includes the ability to mint assets such as photos and GIFs as NFTs, which users can create.
• The creator of an NFT can receive a percentage of the secondary sales as royalties from the buyer.
• Users can list and sell their own NFTs in the market and also purchase NFTs from other users.

Triangular Arbitrage

• This project is created using JavaScript and utilizes the ethers.js library to interact with decentralized exchange smart contracts. It also employs Infura to establish a node provider and contract signer.
• This project finds triangular arbitrage opportunities in decentralized exchanges and calculates profit percentages.
• Specifically implemented for Uniswap V3 exchange, it identifies triangular arbitrage positions.
• Liquidity pools of the exchange are collected using GraphQL and the Uniswap V3 API.
• Challenges include high gas fees for swapping on the Ethereum mainnet and handling pools without liquidity or expired pools.

Flash Loans/Flash Swap

• Flash Loans are uncollateralized loans given to blockchain developers in DeFi without requiring collateral or upfront fees.
• These loans can be obtained programmatically from decentralized exchanges or protocols like Aave using smart contracts.
• Flash Loans enable various strategies such as triangular arbitrage, yield farming, and sandwich swaps to generate profits.
• Repayment fees for flash loans depend on liquidity pools in exchanges or fixed rates in protocols like Aave.
• Combining flash loan contracts with arbitrage projects allows the creation of Flash Swap bots for income generation.
• Challenges include internet limitations, locked liquidity pools, and the need for efficient identification and execution of arbitrage opportunities.

Technical skills

Programming Languages   Javascritp, Solidity, HTML, CSS, C++, SQL