Prakash Khatri

✉ pkhatri981@gmail.com | 🔗 pkhatri.xyz | in linkedin | 💻 github.com/0xPkhatri | 🐦 x.com/0xPkhatri

Education

Indian Institute of Technology, M.Tech in Mechanical Systems Design   July 2018 – Jun 2020
- **project:** Effect of Electric Field on Buckling of Boron Nitride Nanotubes via Molecular Dynamics Simulation

Govt. Engineering College, B.Tech in Mechanical Engineering   July 2014 – Jun 2018

Experience

Lead Developer, Auditfinder.xyz – Remote   2024 – Present
- Spearheaded the development of AuditFinder.xyz, a high-performance, typo-tolerant, search-as-you-type platform designed for audit reports, recognized for its industry-leading speed and accuracy.

Independent Blockchain Developer – Remote   2022 – Present
- Conducted comprehensive research on Uniswap V2 and V3 and other DEX protocols to develop a mathematical model that optimizes profit calculations using optimization techniques such as the "maximize function".
- Utilized the Black-Scholes model and statistical bell curve analysis to establish a relationship between the premiums of OneTouch and European options, optimizing profit strategies through rigorous mathematical modeling and probability assessments.
- Managed and integrated multiple cross-chain APIs including KyberSwap, OdoSwap, 1inch, and Alchemy to execute complex, profitable cross-chain arbitrage opportunities.

Projects

OptiPair,– EthGlobal, Bangkok, 3rd Place Winner
(ethglobal.com/showcase/optipair-x2hsa)
- Developed OptiPair, a Dex-platform that optimizes liquidity concentration within the options chain on decentralized exchanges using advanced market maker price discovery methods. This solution significantly reduces liquidity fragmentation across various strike prices. OptiPair employs a linear algorithm to calculate the optimal liquidity distribution based on two select strike positions,
- **Tools Used:** Solidity, Next.js, TailwindCSS, JavaScript, Flare Network, Web3Auth

Munjo,– EthGlobal, Singapore
(ethglobal.com/showcase/munjo-xhkc3)
- Munjo, a decentralized application tailored for efficient treasury management of DAOs. The platform leverages ERC-7579 to enable advanced functionalities like gasless transactions using Pimlico and scheduled transfers through the Rhinestone module, integrating The Graph and GraphQL for efficient, real-time data retrieval.
- **Tools Used:** ERC-7579, Rhinestone, Pimlico, The Graph, Next.js, GraphQL, Solidity, TailwindCSS, JavaScript

Asanjo,–Devfolio, Hackathon
(devfolio.co/projects/asanjoio-af00)
- Developed Asanjo, a comprehensive DeFi trading tool that enhances the trading capabilities of decentralized finance traders. Utilizing ERC-4337 and ERC-7579, Asanjo introduces a range of advanced features including gasless transactions via Pimlico and scheduled transactions through the Rhinestone module. The platform supports smart trading functionalities like limit orders, stop loss, and take profit orders.
- **Tools Used:** ERC-4337, ERC-7579, Smart Accounts, Pimlico, Rhinestone, Safe, Next.js

Audits,
(github.com/0xPkhatri/Auding-work)
- Using competitive audit platforms like Sherlock and Code4rena to assess and enhance smart contract security. and improving security measures.