

# ADITYA KUMAR MISHRA

## Blockchain Developer

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🌐 <https://github.com/Aditya-alchemist>    📍 Bhubaneswar, India

### SUMMARY

I am a blockchain engineer and DeFi enthusiast with a strong focus on smart contract development, decentralized finance, and protocol security. Passionate about innovation, I thrive on solving complex problems in the Web3 ecosystem and continuously explore advancements in blockchain technology. With expertise in Solidity, Foundry, React, and JavaScript, I am deeply engaged in blockchain research, stablecoins, lending protocols, and on-chain governance. As a hackathon winner and active contributor to the space, I am driven by a vision to build secure, scalable, and impactful decentralized solutions. Always eager to collaborate, learn, and contribute to the growing Web3 ecosystem.

### EXPERIENCE

#### Blockchain Developer

##### GeeksforGeeks kiit

📅 10/2024   Present    📍 Bhubaneswar, India

Student society founded by GeeksforGeeks company

- Designed and implemented full-stack decentralized applications using Solidity, Foundry, React, and Ether.js.
- Built DeFi protocols, including staking, lending & borrowing, and algorithmic stablecoins with Chainlink price feeds integration.
- Developed cross-chain rebase tokens with dynamic supply adjustments and multi-chain compatibility.
- Created NFT-powered applications, such as carbon credit tokenization and event ticketing with smart contract validation.
- Strong expertise in smart contract security, DeFi protocol design, and frontend blockchain integration.

#### Open Source Contributor

##### Summer of Bitcoin

📅 02/2025   03/2025    📍 Remote

Summer of Bitcoin is a global program that trains and mentors students in Bitcoin development, focusing on open-source contributions and real-world applications.

- Selected for the Summer of Bitcoin 2025 Developer Track, focusing on Bitcoin protocol development and advanced cryptographic techniques.
- Gained hands-on experience in Bitcoin script, UTXO model, Taproot, and Lightning Network.
- Worked on assignments covering Bitcoin Core internals, layer-2 scaling solutions, and privacy enhancements.

### PROJECTS

#### Cross chain Rebase Token

📅 03/2025   03/2025    📍 Bhubaneswar, India

🔗 <https://github.com/Aditya-alchemist/Crosschain-Rebase-token>

A cross-chain rebase token adjusts its supply algorithmically while operating on multiple blockchains. It ensures proportional balance changes without affecting ownership and synchronizes supply across networks using protocols like Optimism or Zksynk. This enables seamless interoperability, efficient liquidity management, and price stabilization in DeFi ecosystems.

- Designed and implemented smart contracts enabling supply rebalancing across multiple blockchain networks.
- Integrated cross-chain messaging protocols to synchronize token states and ensure seamless interoperability.
- Focused on secure bridging mechanisms, minimizing risks of exploits and ensuring efficient asset transfers.

### SKILLS

Blockchain Technology		Web3	
JavaScript		OpenZeppelin-contracts	
Merkle trees		Cryptography	
Consensus Algorithms		Smart Contracts	
NFTs	React	DEFI	Chainlink
IPFS	EtherJs	Hardhat	foundry
C language		solidity	

### EDUCATION

#### B.Tech in Electronics and Telecommunication

[Kalinga institute of industrial technology](#)

CGPA  
8.80 / 10.0

📅 07/2023   07/2027  
📍 Bhubaneswar, India

#### Higher secondary education

[Kendriya Vidyalaya karwar](#)

Percentage  
90.4 / 100

📅 03/2021   03/2023  
📍 karwar,India

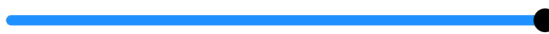
#### secondary education

[Navy Children School](#)

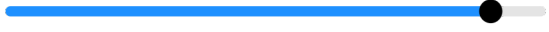
📅 2009   2021    📍 India

### INDUSTRY EXPERTISE

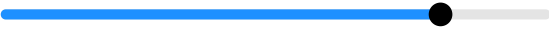
#### Foundry



#### NFT Development



#### DeFi Protocols



# PROJECTS

## Decentralized Stablecoin

📅 02/2025 02/2025 📍 Bhubaneswar, India  
🔗 <https://git hub.com/Aditya-alchemist/Decentralized-Stablecoin-Protocol>

Developed a decentralized stablecoin pegged to the US dollar, using ETH and BTC as collateral. Implemented Chainlink price feeds for accurate valuation and smart contract mechanisms for minting, redemption, and liquidation. Designed to maintain stability through algorithmic adjustments while ensuring transparency and decentralization in the DeFi ecosystem.

- Developed a decentralized stablecoin pegged to the US dollar using ETH and BTC as collateral.
- Integrated Chainlink price feeds for real-time and accurate asset valuation.
- Designed smart contract mechanisms for minting, redemption, and liquidation.
- Ensured price stability through algorithmic adjustments and collateralized reserves.
- Focused on transparency, security, and decentralization within the DeFi ecosystem.

## Merkle Airdrops

📅 03/2025 03/2025 📍 Bhubaneswar, India  
🔗 <https://github.com/Aditya-alchemist/Merkle-Airdrops>

This project implements an Ethereum-based token airdrop using Merkle Trees and EIP 712 signatures for secure and gas-efficient claims. The contract ensures that only eligible users (based on a pre-generated Merkle Root) can claim tokens, and it verifies their identity using cryptographic signatures.

- Built a Merkle tree-based airdrop contract for secure and gas-efficient token distribution.
- Implemented Merkle proof verification to ensure only eligible users can claim tokens.
- Implemented Merkle proof verification to ensure only eligible users can claim tokens.
- Utilized OpenZeppelin's SafeERC20 for secure token transfers.

## NFT TICKETING SYSTEM

📅 01/2025 01/2025 📍 Bhubaneswar, India  
🔗 <https://github.com/Aditya-alchemist/GFGKIIT CRYPTOMA HyperThon>

NFT Event Tickets DApp NFT Event Tickets is a decentralized application (DApp) that allows users to mint NFT-based tickets for events. The app is built with React and powered by Ethereum smart contracts. It offers a seamless way for users to buy tickets, and event organizers can manage funds with ease.

- Developed an NFT-based ticketing system enabling secure and verifiable event access.
- Implemented smart contracts to mint unique, non-tradable NFTs as event tickets.
- Allowed users to verify their ticket ownership via a dApp by entering the token ID.
- Limited total ticket supply to 50 NFTs to ensure controlled distribution.
- Ensured funds collected from ticket sales were securely transferred to the contract deployer.

## NFT-VOTING-CONTEST

📅 12/2024 12/2024 📍 Bhubaneswar, India  
🔗 <https://github.com/Aditya-alchemist/NFT VOTING CONTEST>

Made a project using foundry,solidity,react and ipfs that mints an nft when image is uploaded to it, people can vote for these minted nfts and the highest number of votes to nft is the winner and the winning amount goes to the winner.

- Developed an NFT-based voting contest system for transparent and verifiable elections.
- Designed smart contracts to mint NFTs as voting tokens, ensuring unique participation.
- Allowed users to cast votes by submitting their NFT, preventing multiple votes per user.
- Integrated a real-time tally mechanism to track votes securely on-chain.
- Ensured immutability and fairness by leveraging blockchain transparency.
- Deployed on a testnet for optimization before mainnet implementation.

# RESEARCH EXPERIENCE

## NFT-based Educational certificates and Degrees using Ethereum-based Blockchain

📅 01/2025 02/2025

Guide: Prof. Amit K. Jha  
1) Developed decentralized system to enable transparent, safe and authentic transfer of educational certificates and degrees as non-fungible tokens.  
2) NFTs made sold-bound to prevent sale of degrees or fraud

## E-Voting Systems using Blockchain and ESP32

📅 04/2025 04/2025

1) Designed a blockchain-based e-voting system integrated with ESP32 for secure and tamper-proof elections.  
2) Developed smart contracts to record and verify votes on-chain, ensuring transparency.  
3) Utilized ESP32 microcontrollers for hardware-based authentication and vote casting.

# ACHIEVEMENTS

## HACKATHON- WINNER

Won the Hyperthon conducted by Odisha DAO and GeeksforGeeks KIIT in collaboration with the Ethereum Foundation.

## PARIS BLOCKCHAIN WEEK SEMIFINALIST

Selected as a semifinalist in the Paris Blockchain Week Hackathon for developing an NFT-powered carbon credit system.

## SUMMER OF BITCOIN 2025

Selected for the Summer of Bitcoin 2025 Developer Track, focusing on Bitcoin protocol development.

# CERTIFICATIONS

## EVM CHAIN CERTIFICATION

ISSUED BY - ALCHEMY UNIVERSITY

## CHAINLINK FUNDAMENTALS

ISSUED BY - CHAINLINK

# LANGUAGES

ENGLISH - PROFICIENT

HINDI - NATIVE