Muley Atharva Jayprakash

UG (V Year I Semester)
B.Tech. (Electronics & Communication Engineering)
Contact No: 7066645439
Email: m_ajayprakash@ece.iitr.ac.in
Registration No: 21116062/2026

Indian Institute of
Technology
Roorkee

Area of Interest

Smart Contract Development, Backend Development, DSA, OOPs

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
4th	4th Year	Indian Institute of Technology, Roorkee	6.788
2021	Intermediate (Class XII)	Sanjay Ghodawat University, Kolhapur, Maharashtra	91.83 %
2019	Matriculate (Class X)	St Patricks School, Pune, Maharashtra	91.60 %

Projects

BTC Vesting Contract | Blocksoc, IIT Roorkee   July 2025 - August 2025
- Built end-to-end time locked BTC vesting smart contract on Citreas testnet - an EVM ZK rollup on Bitcoin
- Developed an ERC-721 based vesting contract where each NFT represents a unique token vesting position
- Implemented security measures to avoid Reentrancy attacks, Unauthorized Access and Premature Withdrawal
- Built a react interface with etherjs based smart contract integration for users to create and unlock positions
- Implemented React UI to display a dashboards with details of all positions owned by the connected wallet
- Tech Stack: Solidity, Foundry, React, Etherjs

GoodMaps | ETH Global, New Delhi   September 2025
- GoodMaps is a crowdsourced location review system leveraging ZK-proofs for location verification
- Built a React-based map interface using Leaflet library to render review labels from fetched JSON data
- Designed dynamic relabels with zoom awareness, adaptive font size, color, and z-index based on strength
- Tech Stack: Reactjs, Javascript, Leaflet - OSM React Library

Phillip Reward Token | Take Home Assignment   November 2025
- Built a Dapp that issues ERC20 Reward Tokens to users and allows transfers through a web interface
- Implemented a pausable, ownable ERC20 smart contract with permit function and deployed on Sepolia Testnet
- Implemented React based user interface and etherjs based wallet connection, and smart contract interaction
- Tech Stack: Solidity, Foundry, React, Etherjs

BetsAndStreaks | Etherlink Summer Of Code   July 2025 - August 2025
- Built full-stack Rock-Paper-Scissors (RPS) betting dApp that incentivizes win streaks
- Implemented on-chain escrow settlements in Solidity for secure, automated payouts
- Added commitreveal logic in smart contracts to prevent front-running and guarantee fair play
- Developed NFT reward contracts for five-win streaks and automated USDC payouts for winners
- Tech Stack: Solidity, Javascript, Viem, Foundry

Gasless Swapper - Account Abstraction | Self Project   June 2025 - August 2025
- Developed a custom SwapRouter enabling gasless token swaps between any two ERC-20 tokens
- Implemented a ERC-4337 Paymaster to sponsor gas exclusively for transactions coming from SwapRouter
- Implemented a minimal ERC-4337 Smart Account with ECDSA signature validation and controlled
- execution via EntryPoint
- Tech Stack: Solidity, Foundry

Nft-Marketplace | Self Project   April 2025 - May 2025
- Built a NFT Marketplace in Solidity enabling users to list, update, cancel, and purchase NFTs securely
- Achieved 100% test coverage using Foundry, validating listing creation, cancellation, updates, and purchases
- Tracked gas costs with snapshots for create, update, cancel, and purchase operations
- Tech Stack: Solidity, Foundry

Awards / Scholarships / Academic Achievements

- Secured AIR 3689 | JEE Advanced 2021
- Secured Rank 159 | MHT-CET 2021 | PCM

Skills

Computer languages	Solidity, Javascript, C++
Software Packages	Git/GitHub , Visual Studio Code, Foundry
Additional Courses	Data Structures and Algorithms, Object Oriented Programming

Positions of Responsibility & Extra Curriculars

Additional Secretary | Choreography and Dance Section, IITR   August 2024 - Present
- Administered the Operations, Management and Social Media promotions of the college dance crew of 50+ members
- Coordinated the final performance to compete with 23 IITs, secured 1st position in dance arts at Inter IIT Cultural Meet 5.0