

# Anjanay Raina

anjanayraina326@gmail.com • Github • Portfolio Website

## WORK EXPERIENCE

### Independent Smart Contract Auditor

July 2023 - Present

- Analyzed codebases using **Slither**, **Solidity metrics**, and **Foundry** to identify **10+ Medium, Low-risk**, and **QA vulnerabilities** and write stellar POC's. Identified gas-saving measures resulting in a reduction of gas costs.
- Incorporated tools such as **Solodit**, **Aderyn**, and **Audit Wizard** to identify contract vulnerabilities. Deployed risk mitigation strategies to ensure the security of the smart contracts.
- Achieved a ranking among the **top 300** worldwide on the C4 weekly leaderboard being currently ranked at **345**.

### Natwest Group | TI Intern

May 2023 - July 2023

- Developed and implemented **Oracle Business Intelligence** functionalities to transform complex and unfiltered data into visually appealing reports.
- Added **Bursting Queries** for the reports to schedule the reports to the respective clients automatically, resulting in a **100 Percent** reduction in delivery times.
- Audited** the reports and created the design and execution of specialized **unit tests** and **scenarios** to assess report functionality against **CGL10** and **CGL76** databases, guaranteeing the validity and accuracy of reports.

### DLT Labs | Student Researcher

January 2023 - July 2023

- Conducted research on Blockchain Technologies employed in the **Telecommunications** industry, with use cases.
- Led a team in developing a **Two-Layered Blockchain Architecture: Data Storage and Authentication Layer** for mobile device theft prevention. Also wrote a **Research Paper** for the solution submitted to **IEEE Ants**.
- Set up **Hyperledger Fabric**, **Docker**, and wrote **Contracts** to simulate the proposed method of preventing mobile device theft, reducing the resolution time by 100 times compared to CEIR.

### Chatbuck | Blockchain Developer

January 2022 - August 2022

- Played a key role in developing a **Layer 2 solution** for the messaging application and the **Litepaper**.
- Leveraged **Infura** to integrate **Web3** library, improving **Android app** UI; emphasized user experience and interface design, leading to a 10 Percent increase in user retention for the messaging application.
- Developed and deployed an **ERC-20** token solution for ChatBuck, streamlining payment processes and facilitated secure and efficient transactions for **50,000+ users**.

## PROJECTS

### PerpetualVault

[Github](#)

- Designed **Perpetuals Position** protocol, implementing **ERC4626**-compliant smart contracts for liquidity, scaling positions, and collateral management.
- Integrated a custom **ERC20** token environment (**WBTC, USDC**) with a **unique gas stipend system** for **Liquidators** and engineered a fault-tolerant **Double Oracle system** using **Chainlink** to bolster real-time pricing data reliability.
- Conducted exhaustive **security audits** and **Invariant Testing** and **Fuzz Testing** using **Foundry**, leveraging **Slither** and **Aderyn** for vulnerability scans, ensuring security and fortifying against potential threats.

### Decentralized Journalism Platform

[Github](#)

- A Decentralized Journalism platform with the aim of privacy and freedom of expression in journalism.
- Programmed Solidity contracts (**ERC20, ERC721, Access Control by OpenZeppelin**) for anonymous blog posting, management, and integrated **Superfluid** for Real-Time Token Streaming.
- Engineered a robust **NFT** minting contract, enabling the creation of unique blog NFTs; stored and retrieved blog metadata on **IPFS**, ensuring seamless access and preservation of content details.

### Everything About Product

[Github](#)

- A Project for the NAVH Hackathon, deploying smart contracts via **Infura API** and **Truffle**. Connected the frontend to the blockchain using **Ethers.js** and **Metamask SDK**.
- Implemented a robust smart contract with OpenZeppelin's **Access Control** and **Counters** libraries. Incorporated advanced tools like **Solidity Visual Developer**, **Surya**, and **Slither** to enhance security, identify vulnerabilities, and optimize gas usage.

## SKILLS

### Computer Languages

Solidity, Yul, Move, Java, JavaScript, Python, SQL, Typescript

### Platforms & APIs

Remix IDE, Hyperledger Fabric, Alchemy, Metamask, Infura, Docker, Code4rena, Sherlock,

### Libraries/Frameworks/Tools

OpenZeppelin, Superfluid, Foundry, Slither, Solidity Metrics, Hardhat, EthersJS, ReactJS

### EIP/ERC

20, 721, 777, 1155, 4625, 2981, 165

## AWARDS AND POSITION OF RESPONSIBILITY

**Aptos Winter School IIT Bombay**, Got Selected among a pool of 60 students in India to attend winter school  
2023 - Dec 2023

Dec

**GDSC Blockchain Mentor**, Got Selected as GDSC Core Member and Blockchain Mentor

August 2023 - Present

**Team Tech Lead**, Got selected as the Tech Lead for Research Work in DLT Labs

January 2023 - July 2023

**Binance Campus Builder**, Got Selected as Campus Ambassador for Binance

December 2022 - April 2023

EDUCATION

Indraprastha Institute of Information Technology, Delhi  
B.Tech (Computer Science & Biosciences)

January 2021 - July 2024