

Anjanay Raina

anjanayraina326@gmail.com • Github • Portfolio Website

SUMMARY

Blockchain Developer, Smart Contract Auditor, and Data Scientist with 3+ years of experience delivering secure, efficient smart contracts and data-driven solutions. Proven track record in DeFi, machine learning, and Web3 protocols. Skilled in Solidity, Python, Java, and Golang, with a strong focus on security auditing, gas optimization (achieved 60% gas savings), scalable protocol design, and robust infrastructure development.

WORK EXPERIENCE

Independent Smart Contract Auditor

July 2023 - Present

- Performed comprehensive security audits for **Zus Network**, **Empower Coin**, **Moonvera Solutions**, and other Web3 firms, identifying and resolving **50+ critical issues**.
- Led audits for Moonvera Solutions and Zus Network, ensuring adherence to top-tier security standards and implementing effective gas optimizations.
- Achieved **60% gas savings** by leveraging tools such as **Slither**, **Foundry**, and **Solidity Metrics**, reducing costs and enhancing transaction efficiency.
- Ranked among the **top 300 global auditors** on Code4rena (**345**) and Sherlock (**846**), reflecting strong security work.
- Utilized advanced tooling (**Solodit**, **Aderyn**, **Audit Wizard**) and produced comprehensive **Audit Reports** to document findings and remediation steps.

NatWest Group | Data Scientist

July 2024 - Present

- Designed and implemented a **data mesh architecture**, decentralizing the centralized pipeline, introducing governance policies, and implementing **data contracts** for secure and policy-compliant data transfers.
- Migrated the database from **MySQL to AWS S3**, optimizing storage, scalability, and accessibility for analytics workflows.
- Implemented a robust **real-time data analysis pipeline** with automated testing, alerting, and monitoring tools, reducing response times by **5500%**.

DLT Labs | Student Researcher

January 2023 - July 2023

- Pioneered a **Two-Layered Blockchain Architecture** in telecommunications to mitigate mobile theft, achieving a **100x faster resolution time**.
- Integrated **Hyperledger Fabric** and authored a research paper submitted to **IEEE Ants**.
- Research Paper**

Chatbuck | Blockchain Developer

January 2022 - August 2022

- Engineered a **Layer 2 solution** for messaging with **Web3** integration using **Infura**, enhancing UI responsiveness.
- Deployed an **ERC-20 token** to streamline payment processing, supporting **50,000+ users**.

PROJECTS

PerpetualVault

[Github](#)

- Architected a **Perpetuals Position Protocol** with **ERC4626**-compliant contracts for streamlined liquidity and collateral management.
- Integrated **Chainlink Oracles** into a **Double Oracle System**, ensuring reliable, real-time pricing data.
- Strengthened protocol robustness through comprehensive **security audits**, **invariant tests**, and **fuzz testing** using **Foundry**.

VertexSwap (In Progress)

[Github](#)

- Developed a decentralized exchange with **zero fees** and **sandwich attack protection**, ensuring secure transactions.
- Designed **atomic arbitrage** and implemented **cross-chain arbitrage** strategies, maximizing trading profits.
- Extended **ERC4626** support for **multi-token base assets**, increasing protocol flexibility.
- Created a rigorous testing framework with **unit**, **fuzz**, and **invariant** tests, ensuring reliability.
- Optimized the **AMM** model, reducing gas costs by **40%**, and identified vulnerabilities with **Foundry** and **Slither**.

Decentralized Journalism Platform

[Github](#)

- A project built during **Devacation'23**, aimed at creating a decentralized journalism platform that prioritizes **privacy** and **freedom of expression**.
- Programmed **Solidity contracts** (**ERC20**, **ERC721**, **Access Control by OpenZeppelin**) to enable anonymous blog posting and management, and integrated **Superfluid** for real-time token streaming.
- Engineered a robust **NFT minting contract**, allowing the creation of unique blog NFTs; stored and retrieved blog meta-data on **IPFS**, ensuring seamless access and content preservation.

SKILLS

Programming Languages

Solidity, Yul, Python, Java, Golang, Rust, SQL, JavaScript, TypeScript

Blockchain Tools

Hardhat, Anchor, Foundry, Slither, OpenZeppelin, Chainlink, Superfluid, Solidity Metrics

Frameworks & APIs

ReactJS, Ethers.js, Infura, Alchemy, Docker, Hyperledger Fabric, Metamask

EIP/ERC Standards

ERC20, ERC721, ERC1155, ERC4626, ERC165, ERC777, ERC2981

Platforms

Code4rena, Sherlock, Remix, GitHub, VS Code, Linux

AWARDS AND POSITIONS OF RESPONSIBILITY

Peak Hackathon Winner

July 2024 - July 2024

Secured **2nd place** at the Peak Hackathon organized by Mantra Chain, recognized for innovative solutions.

Aptos Winter School IIT Bombay

December 2023 - December 2023

Selected among **60 students in India** for a prestigious blockchain winter school, demonstrating strong subject-matter expertise.

GDSC Blockchain Mentor

August 2023 - June 2024

Served as a **Google Developer Student Club Core Member and Blockchain Mentor**, guiding peers in decentralized technologies.

EDUCATION**Indraprastha Institute of Information Technology, Delhi***January 2021 - July 2024*

B.Tech (Computer Science & Biosciences)