ASHISH KUMAR SAHOO

Odisha, India

Phone | Mail | GitHub | LinkedIn | Twitter | Telegram | Blogs

TECHNICAL SKILLS

Languages: Solidity, JavaScript, TypeScript, HTML **Frontend:** React.Js, Next.Js, Bootstrap5, TailwindCSS

Backend: Node.js, Express, MongoDB

Web3: Web3.js, Ethers.js, Wagmi, DeFi, ERC20, ERC721, ERC1155, ERC4626

Blockchain: Ethereum, Binance, Polygon, Arbitrum **Tools:** VS Code, RemixIDE, Git, Hardhat, Foundry

WORK EXPERIENCE

Blockchain Developer / Aarna Protocol

NOV. 2023 - AUG. 2024

- Led the development of a **multi-platform liquid staking** smart contract on **Ethereum**, improving user staking experience by integrating protocols such as **Lido**, **Ankr**, **Frax**, **and EigenLayer**.
- Architected advanced **liquid restaking solutions**, **optimizing yield generation and enhancing capital efficiency** across multiple blockchain networks, increasing user returns by 30%.
- Implemented robust security measures, resulting in a 50% reduction in potential vulnerabilities and enhancing user trust.
- Integrated these protocols to create a seamless, **user-centric staking experience**, increasing user engagement by 40%.

Freelance Smart Contract Developer / SubLabs

JUL. 2023 - DEC. 2023

- Collaborated with a team to design and deploy smart contracts for decentralized applications, ensuring secure and efficient contract functionality.
- Optimized and tested contract functionality, reducing deployment errors by 20%.
- Applied **Uniswap V3 architectural** principles to Tayaswap contracts, enhancing scalability and efficiency, resulting in a 25% performance boost.
- Focused on **creating secure smart contracts** that align with industry best practices, improving contract robustness by 30%.

Web3 Developer / BSBSTech Pvt. Ltd.

MAR 2023 - JUL 2023

- Developed sophisticated smart contracts for token staking, P2P transactions, and referral program.
- Explored advanced blockchain concepts, including consensus mechanisms and token economics.
- Integrated **Web3 libraries (web3.js, ethers.js, wagmi)** with **Next.js and React** to create robust **decentralized applications**, increasing functionality and user satisfaction by 25%.

Blockchain Developer / NFThing

MAY 2022 - NOV. 2022

- Developed foundational smart contracts for **NFT-focused** decentralized applications, enhancing system security and reliability by 30%.
- Integrated diverse **Web3 APIs** for comprehensive **NFT information retrieval**, improving data accessibility and user experience by 40%.
- Conducted thorough security testing and code reviews, reducing security vulnerabilities by 50%.
- Engineered a **custom Web3 API** for seamless **NFT data analysis and presen**tation within the **DApp**, increasing data processing efficiency by 30%.

PROJECTS

Onchain Credit Score System: 🔗

- Created a blockchain-based credit scoring mechanism using Solidity smart contracts and Node.js, ensuring secure and transparent credit evaluations.
- Assessed user credit scores based on transaction history, wallet balance, and other on-chain data, providing accurate and reliable credit assessments.
- Designed a RESTful API that fetches real-time user transaction data and updates the credit score on the contract after 21 days, improving data accuracy and timeliness.
- Integrated with the Ethereum blockchain using Ethers.js and Tatum SDK, enhancing the system's scalability and security.
- Deployed on the Ethereum Sepolia testnet for demonstration and testing, validating functionality and performance before mainnet launch.

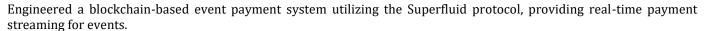
DeWork (Decentralized HR and Payroll Management System): 🔗

- Built a blockchain-based HR system featuring token incentives for employee engagement, motivating and rewarding punctuality and extra work.
- Implemented smart contracts for secure employee data management on Ethereum, ensuring data integrity and security.
- Integrated IPFS for decentralized storage of employee information, reducing reliance on traditional databases and enhancing data resilience.
- Developed a token-based reward system for tracking punctuality and additional work hours, promoting employee accountability and productivity.
- Created a Web3-enabled frontend using Next.js for seamless blockchain interaction, improving user experience and accessibility.

Decentralized Research Paper Vault (DRPV): 🔗

- Designed a blockchain-based platform to transform academic publishing and licensing, offering a decentralized alternative to traditional models.
- Developed smart contracts in Solidity for secure, transparent paper licensing, ensuring fair and reliable transactions.
- Incorporated IPFS for decentralized storage of research papers, fully decentralizing the system and enhancing data security.
- Built a user-friendly frontend with Next.js for paper uploads and user interactions, improving accessibility and ease of use.
- Designed a cryptocurrency-based system for fair author compensation, ensuring authors are rewarded upon the purchase of their research papers.

FluidPass (Dynamic Event Payment System) | MetaSchool R2W3-II Winning Project: 🔗



- Designed a responsive frontend using Next.js and Ethers.js for user interactions, enhancing user experience and engagement.
- Integrated Superfluid SDK for dynamic, time-based compensation of event attendees, ensuring fair and accurate payments.
- Utilized the Polygon blockchain, reducing transaction costs and improving efficiency.
- Created a system for fair, transparent compensation based on actual event engagement, promoting transparency and fairness in event payments.

EDUCATION

MASTER OF COMPUTER APPLICATIONS (MCA)

2020 - 2022

INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY (IMIT), CUTTACK

CGPA:9.18

PUBLICATIONS

- Guide to prevent access control flaw
- Guide to reentrancy vulnerabilities