Chirag Agarwal

EDUCATION

BITS Pilani Goa, India

B.E. (Hons.), Electrical and Electronics Engineering

Aug 2019 - May 2023

WORK EXPERIENCE

Pay3 Bangalore, India

Software Engineer

Jan 2023 - PRESENT

- Designed and implemented a user-friendly checkout solution for NFTs (ERC721/ERC1155) and ERC20 tokens, providing a seamless payment experience with options to pay in fiat currency or various ERC20 tokens
- Developed backend microservices using NodeJS for integrating various DEXs and on/off ramp partners
- Created webhooks to capture and store transaction statuses and data across 9+ payment partners
- Developed an **SDK** tailored for Web2 users, enabling seamless social, email, and phone **login** options. Integrated Metamask, Coinbase, and WalletConnect to support multi-wallet functionality for Web3 login experiences
- Created and tested **smart contracts** and scripts for token swapping via **Uniswap Router** and batch payments

Yushu Excellence Technologies Pvt. Ltd

Blockchain Developer Intern

Aug 2022 - Oct 2022

- Implemented a **UniswapV2** fork on Cube Network, a new Layer1, developed smart contracts that utilize Uniswap's Core & Router contracts. Implemented swap and liquidity features on the protocol's frontend using **Ethers.js**
- Authored a detailed explainer on fractional NFTs, aimed at enhancing understanding within the team

Kubera Capital

Web3 Research Analyst Intern

Nov 2021 - Feb 2022

- Conducted extensive research on **DeFi** protocols in the Web3 ecosystem, explored projects on Polkadot & Kusama, and deepened insights into investment opportunities in that ecosystem
- Monitored a diverse portfolio of over 20 projects to identify investment opportunities amid market fluctuations

TECHNICAL SKILLS

Programming: JavaScript, C++, Node.js, React.js, Next.js, HTML, CSS

Blockchain: Ethereum, Solidity, Hardhat, Ethers.js, OpenZeppelin, Chainlink Oracles, ERC20, ERC721, ERC1155

ACHIEVEMENT

• Box Protocol - Winner at ETHforAll Hackathon §

- Developed an easy, self-custodial platform for buying, selling and creating tokenized crypto portfolios
- Awarded Best Project by Chainlink Labs among 430 global submissions organized by Devfolio and ETHIndia

PROJECTS

• CommuneIn **9**

- ETHIndia 2023 hackathon project, enabling users to verify citizenship with Aadhaar using zk-proofs
- Implemented secure user verification through **passkey** registration, enhancing trust and security
- Created an exclusive platform targeted for Indians, fostering engagement in the Web3 ecosystem

· Batch Payments

- Developed a Solidity smart contract to facilitate batch payments in ETH, focusing on optimizing **gas efficiency** during simultaneous transfers to multiple recipient addresses
- Implemented comprehensive test cases to ensure the reliability and functionality of the smart contract

• Integration of IoT - Thesis

- Integrated IoT and blockchain technologies to address security and trust issues in centralized IoT systems
- Utilized blockchain oracles for secure data exchange between smart contracts and IoT devices

• Mr. Gadget - Generative NFT Collection 🔗

• Developed a collection of 241 unique NFTs on Polygon with metadata on IPFS, leveraging image processing and metadata handling libraries, and achieved a **37% unique ownership** rate upon selling out the collection

INTERESTS