Chirag Agarwal

EDUCATION

BITS Pilani Goa, India

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

Aug 2019 - May 2023

WORK EXPERIENCE

Pay3 Bangalore, India

Founding Software Engineer

Jan 2023 - PRESENT

- Developed backend **microservices** for integrating payment partners, DEXs and on/off ramp partners
- Created **webhooks** to capture and store transaction statuses and data across 9+ payment partners
- Developed a backend microservice to perform health checks and monitor the status of payment partner systems
- 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 an SDK for onboarding of Web2 users, supporting social, email, phone, and Web3 login options
- 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, Java SpringBoot, Node.js, React.js, Next.js, Hasura, Jenkins, Grafana **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 Ø
 - 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