Sebastian T F

Smart Contract Engineer Coinvise

Ambitious developer with experience in smart contract and web development, with interests in Web3 security, ZK, MEV and DeFi

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Conducts EVM deep dives for opcode level understanding and **low level EVM** expertise

Advanced gas optimizations using Yul

Leverages Solidity **IR**-based compilation for low level inspections and optimizations

Follows past audit reports and post-mortem reports on Code4rena, Sherlock and Immunefi

Completed **CTFs** include Ethernaut, Capture The Ether, Damn Vulnerable DeFi

Backend applications with **NestJS**, Koa, Express

Interested in **MEV** developments and long-tail strategies

Deployed **AutoCompoundor** bot for Revert Finance with **concurrency optimizations** gaining a short term edge

Knowledgable in developing high performant bots and tools using **Rust**

EVM / RPC tricks using state override and access lists

yAcademy ZK Fellowship Cohort 2

encode.club ZK Oct, zkEVM Nov 2023 Bootcamps

Interested areas include **ZK Audits** and **security in ZK** powered applications, blockchains, rollups

Fuzz tests and Invariant testing using Foundry

Hardhat based project development expertise

Repos maintained:

- multisend-yul Optimized Multisend contract using Yul
- <u>ethernaut-foundry</u> Ethernaut solutions using Foundry
- solidity-template PaulRBerg's hardhat-template fork
- <u>ts-eth-template</u> Ethereum TypeScript template
- <u>rs-eth-template</u> Ethereum Rust template
- typescript-template TypeScript template

Developed advanced on-chain gas estimation with state overrides and access lists: <u>estimate-gas-client</u>

Overall 5+ years of experience in software development

SKILLS

Solidity

Typescript

Rust

Foundry

Hardhat

Ethers.js

Waffle

ENS

OpenZeppelin Contracts

Subgraphs

Dune Analytics

Truffle Suite, Ganache

Hyperledger Sawtooth Hyperledger Fabric

Node.js

NestJS

Express

Koa

Django

Java Spring, Spring Boot JUnit, Mockito

Testing

Kubernetes

Docker, Docker Compose

Helm

Azure

DevOps

Concourse CI

NewRelic

Android

JavaScript

Bootstrap

MongoDB

PHP

Python

PROFESSIONAL EXPERIENCE

Smart Contract Engineer

Coinvise, Aug 2021 - Present

- Developing smart contracts, subgraphs & Dune dashboards
- ERC-1967 proxies, Proxy Factories, ENS registrar, ERC-1167 Minimal Clones, Merkle Trees, ECDSA Signatures, Native Meta Transactions
- ERC20 & ERC721 Claimable Campaigns
- Unlock Protocol integrations + hooks
- NFT Memberships
- Developed CoinDesk DESK token
- Developed NestJS backend system from scratch to manage DESK token rewards
- Collectives with Dividends, Merkle Airdrops, Vesting, ERC20 templates + meta txn factories
- <u>Campaigns</u>, <u>ERC721TokenFactory</u>, <u>UnlockFactory</u>,
 <u>AirdropOnPurchaseGrantHook</u>, <u>MembershipsFactory</u>,
 <u>MembershipsProxy</u>, <u>Memberships</u>, <u>DESKToken</u>, <u>QuestRewards</u>,
 <u>CoinviseENSRegistrar</u>, <u>DividendManager</u>, <u>CollectiveFactory</u>,
 <u>Collective</u>, <u>MerkleAirdropFactory</u>, <u>MerkleAirdrop</u>,
 <u>ERC20TokenFactory</u>, <u>VestingFactory</u>, <u>VestingProxy</u>, <u>Vesting</u>

Gitcoin KERNEL Block III

May 2021

- Developing YieldNFT
- Incredible Web3 + Crypto community

Devfolio Ethereum India Fellowship 2.0

Feb 2021 - Apr 2021

- Developed <u>YieldNFT</u> peer-to-peer marketplace for generating yield from idle NFTs
- Mentorship from James Young (Collab.land, Abridged)

Systems Engineer

Tata Consultancy Services, Sept 2020 - Nov 2021

- Developing scalable enterprise-grade microservices for M&S
- Spring Boot, JUnit tests with Mockito
- Kubernetes deployment + configurations using Helm charts
- Docker
- Concourse DevOps pipelines
- NewRelic logging & monitoring

Gitcoin Freelance Bounties

Gitcoin, Sept 2019

• Contributed to Gitcoin Core, Ethereum.org, HOPR Net, blockchainetl, Arweave, etc.

AWARDS

Smart India Hackathon 2020 Winner

Jute Board, Ministry of Textiles, AICTE, MHRD India, Aug 2020

Developed jute sacking bag supply chain tracking application using Hyperledger Fabric

<u>Game Oasis Blockchain Hackathon</u> <u>Winner</u>

Matic - Axie Infinity, Oct 2019

Winner of bounties proposed by Matic, Axie Infinity and Celer Network

Developed prototype for betting platform to bet on Axie Infinity battles.

Successfully deployed a retro game on the CelerX mobile gaming platform

Smart India Hackathon 2019 Winner

AICTE, MHRD India, Mar 2019

Developed a blockchain-based Farm To Fork traceability solution with Hyperledger

CERTIFICATIONS

<u>AZ-900</u>

Microsoft Certified: Azure Fundamentals May 2021

GCP Fundamentals

Core Infrastructure Sept 2019

EDUCATION

Bachelor's Degree

Computer Science Aug 2016 - May 2020

Completed B.Tech Computer Science from APJ Abdul Kalam Technological University