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

github.com/sebastiantf
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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

• simple-stablecoin - Stablecoin using CDPs

• ethernaut-foundry - Ethernaut solutions using Foundry

• solidity-template - PaulRBerg's hardhat-template fork

• rs-eth-template - Ethereum Rust template

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

Overall 5+ years of experience in software development with 2+ years focused on Web3

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
- Campaigns, ERC721TokenFactory, UnlockFactory, AirdropOnPurchaseGrantHook, MembershipsFactory, MembershipsProxy, Memberships, DESKToken, QuestRewards, CoinviseENSRegistrar, DividendManager, CollectiveFactory, Collective, MerkleAirdropFactory, MerkleAirdrop, ERC20TokenFactory, VestingFactory, VestingProxy, Vesting

Gitcoin KERNEL Block III
May 2021

- Developing YieldNFT
- Incredible Web3 + Crypto community

Devfolio Ethereum India Fellowship 2.0
Feb 2021 - Apr 2021

- Developed YieldNFT **-** 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, blockchain-etl, Arweave, etc.

AWARDS

Smart India Hackathon 2020 Winner
Jute Board, Ministry of Textiles, AICTE, MHRD India, Aug 2020

Developed jute bag supply chain tracking application using **Hyperledger Fabric**

Game Oasis Blockchain Hackathon Winner
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

AZ-900
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