SUMIT GHOSH

Bangalore, India · sumit@sumit-ghosh.com · `github.com/skulltech` · `linkedin.com/in/summitkg`

EDUCATION

Indian Institute of Technology Delhi — New Delhi
Integrated BTech and MTech in Computer Science — 2016 – 2021

EXPERIENCE

NFTY Finance — `nfty.finance`. Miami, Remote
Fullstack Ethereum Developer — Mar '23 – Present
- Developed Ethereum smart contracts, along with industry standard tests, Graph Protocol subgraphs and TypeScripts SDKs.
- Worked on the React frontend which fetches data from the subgraph and interacts with the smart contracts.
- Technologies used: Ethereum, Solidity, TypeScript, React, Hardhat, Typechain, Graph Protocol, Wagmi, Ethers.

Solvent Protocol — `solvent.xyz`. Mumbai, Remote
Solana Blockchain and Backend Developer — Mar '22 – Nov '22
- Refactored and developed new features of the Solvent and Strikr smart contracts on Solana, taking care of all possible security vulnerabilities.
- Created TypeScript SDKs to facilitate the use of the aforementioned smart contracts.
- Devised and implemented a caching layer for storing all relevant on-chain transactions and states of the Solvent smart contract to a database, speeding up the frontend and enabling statistics on past data.
- Technologies used: Solana, Anchor, Rust, TypeScript, Supabase, PostgreSQL.

Harmonic — `harmonic.ai`. San Francisco, Remote
Python Backend Developer — Apr '21 – Nov '21
- Wrote comprehensive unit tests for a suite of microservices that constituted a large-scale data pipeline, resulting in a significant increase in test coverage and improved system uptime.
- Refactored and overhauled the design of a few key microservices, resulting in their parallelization and a remarkable 100x improvement in speed.
- Developed a high-quality, modern API layer using FastAPI, designed for both internal and external consumption.
- Technologies used: GCP, FastAPI, PostgreSQL, Python, Docker, Redis, Event Sourcing, CircleCI, PyTest.

American Express — Bangalore, Remote
Sofware Engineering Intern — May '20 – Jul '20
- Contributed to the development of an enterprise-level infrastructure monitoring platform.
- Designed and developed an automation tool that facilitated the self-healing of systems experiencing disk space-related issues.
- Technologies used: Ansible, Elasticsearch, Kibana, Splunk, RabbitMQ.

Department of Computer Science and Engineering, IIT Delhi — New Delhi
System Administrator — Sep '17 – Jul '21
- Implemented an OAuth-based authentication system to be utilized by applications within the infrastructure.
- Expertly managed servers, ensuring optimal performance, and promptly addressing all support requests.
- Technologies used: Linux, Apache2, Reverse Proxy, VM, DNS, DHCP.

Freelancing and Contract Work — Remote
Software Developer — Jan '16 – Present
- Worked with about 50 clients so far, ranging from solopreneurs to medium-sized businesses.
- Technologies used: Python, Selenium, Flask, Django, AWS, QT, Scrapy, Celery, Redis, PostgreSQL, MySQL, Nginx, SMTP, IMAP, DNS, Bootstrap, UIKit, Linux.

CERTIFICATIONS

AWS Certified Solutions Architect Associate
Familiarity with designing cloud infrastructures in AWS.

PROJECTS

Bargain *AWS, Python, Serverless* — `github.com/skulltech/bargain`
- Developed Bargain, a serverless app which tracks Amazon prices and sends alerts whenever there's a change.
- Expertly utilized AWS Lambda, SQS, DynamoDB, SNS, and API Gateway to construct a robust, serverless infrastructure that delivers seamless performance. Here's a `blog post` detailing the development.

SKILLS

Programming Languages: TypeScript, Python, SQL, Solidity, Rust.
Misc.: Git, PostgreSQL, FastAPI, Flask, Django, Mocha, Chai, Pytest, React, QT, Anchor, Supabase, Redis, MySQL, AWS, Serverless, GCP, Linux, Blockchain, Ethereum, Solana, Docker, Hardhat, Anchor.