

SUMIT GHOSH

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EDUCATION

Indian Institute of Technology Delhi
Integrated BTech and MTech in Computer Science

New Delhi
2016 – 2021

EXPERIENCE

NFTY Finance

Fullstack Ethereum Developer

nfty.finance

Mar '23 – Present

- Developed Ethereum smart contracts, along with industry standard tests, Graph Protocol subgraphs and TypeScript 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

Solana Blockchain and Backend Developer

solvent.xyz, app.strikr.xyz

Mar '22 – Nov '22

- Refactored and wrote new features of the Solvent and StriKr smart contracts on Solana, taking care of all possible security vulnerabilities.
- Wrote TypeScript SDKs for the above smart contracts.
- Created 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

Python Backend Developer

harmonic.ai

Apr '21 – Nov '21

- Wrote unit tests for microservices which constitute a big data pipeline. The resulting increase in test coverage significantly improved uptime.
- Refactored and overhauled the design of a few key microservices, which led to parallelisation and almost 100x improvement in speed.
- Wrote a modern, production grade API layer using FastAPI, to be consumed internally and by customers.
- Technologies used: GCP, GKE, FastAPI, PostgreSQL, Python, Docker, Redis, Event Sourcing, CircleCI, PyTest.

American Express

Software Engineering Intern

americanexpress.com

May '20 – Jul '20

- Worked on the enterprise infrastructure monitoring platform.
- Developed an automation tool that aided in self-healing of systems which experience disk space related issues.
- Technologies used: Ansible, Elasticsearch, Kibana, Splunk, RabbitMQ.

Department of Computer Science and Engineering

System Administrator

IIT Delhi

Sep '17 – Jul '21

- Implemented an OAuth authentication system to be leveraged by apps within the infrastructure.
- Maintained servers and networks, responded to support requests.
- Technologies used: Linux, Apache2, Reverse Proxy, VM, DNS, DHCP.

Freelancing and Contract Work

Software Developer

Various Companies

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

- Created Bargain: a serverless app which tracks Amazon prices and sends alerts whenever it changes.
- The app uses AWS Lambda, SQS, DynamoDB, SNS, API Gateway to provide a completely serverless infrastructure. Here's a [blog post](#) detailing the development.

SKILLS

Programming Languages: TypeScript, Python, SQL, Rust, Solidity

Misc.: Git, PostgreSQL, FastAPI, Flask, Django, Mocha, Chai, Pytest, React, QT, Anchor, Supabase, Redis, MySQL, AWS, Serverless, GCP, Netlify, Linux, Blockchain, Ethereum, Solana, Docker, IPFS, Hardhat, Anchor, PyCharm, VS Code.