SUMIT GHOSH

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

CERTIFICATIONS

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

EXPERIENCE

Solvent Protocol
`solvent.xyz`, `app.strikr.xyz`

Solana Blockchain and Backend Developer — Mar 2022 – Present
- 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
`harmonic.ai`

Python Backend Developer — Apr 2021 – Nov 2021
- 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.
- Was on-call for a few weeks and resolved all production bugs that came up.
- Technologies used: GCP, GKE, FastAPI, PostgreSQL, Python, Docker, Redis, Event Sourcing, CircleCI, PyTest.

American Express
`americanexpress.com`

Sofware Engineering Intern — May 2020 – Jul 2020
- 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
IIT Delhi

System Administrator — Sep 2017 – Jul 2021
- Implemented an Oauth authentication system to be leveraged by apps within the infrastructure.
- Maintaining the computer systems and networks, responding to support requests.
- Technologies used: Linux, Apache2, Reverse Proxy, VM, DNS, DHCP.

Freelancing and Contract Work
Various Companies

Software Developer — Jan 2016 – 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.

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.

Aegis *Web3, Ethereum, React*
`devfolio.co/projects/aegis-9c2b`

- Created Aegis: a web3 app to support the creator ecosystem. Won 3 awards in the ETHernals hackathon hosted by ETHIndia.
- The app allows fans to support creators by streaming money to them, and creators to post exclusive contents to their premium fans. It also allows creates exclusive fan clubs using NFT collections.

SKILLS

Programming Languages: Python, TypeScript, SQL, Rust, Solidity
Frameworks: FastAPI, Flask, Django, Pytest, React, QT, Anchor
Infrastructure: Supabase, Redis, PostgreSQL, MySQL, AWS, Serverless, GCP, Netlify, Linux, Blockchain, Ethereum, Solana, Docker, IPFS
Tooling: Hardhat, Anchor, Metamask, Phantom, Git, PyCharm, VS Code, Remix.

EDUCATION

Indian Institute of Technology Delhi
New Delhi

Integrated BTech and MTech in Computer Science — 2016 – 2021