

# SUMIT GHOSH

Bangalore, India · hi@sumit-ghosh.com · [github.com/SkullTech](https://github.com/SkullTech) · [linkedin.com/in/sumitkg](https://linkedin.com/in/sumitkg)

## EDUCATION

---

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

New Delhi  
2016 – 2021

## PROJECTS

---

**Metadrive** *Web3, Ethereum, React*

[metadrive.vercel.app](https://metadrive.vercel.app), [github.com/0xMetadrive](https://github.com/0xMetadrive)

- Created Metadrive: a web3 app for uploading and sharing encrypted files in a fully decentralized manner.
- The app uses IPFS, Ethereum and cryptography as the building blocks and lets users upload encrypted files to IPFS which would only be accessible by people they share the file with.

**Aegis** *Web3, Ethereum, React*

[aegis-staging.netlify.app](https://aegis-staging.netlify.app), [github.com/0xAegis](https://github.com/0xAegis)

- Created Aegis: a web3 app to support the creator ecosystem. Won 3 awards in the ETHernals hackathon hosted by ETHIndia [devfolio.co/projects/aegis-9c2b](https://devfolio.co/projects/aegis-9c2b).
- 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 creating exclusive fan clubs using NFT collections.

## EXPERIENCE

---

**Solvent Protocol**

[solvent.xyz](https://solvent.xyz), [app.strikr.xyz](https://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 Labs**

[hlabs.xyz](https://hlabs.xyz)

*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](https://americanexpress.com)

*Software 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.

## SKILLS

---

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

**Frameworks:** Anchor, FastAPI, Flask, Django, Pytest, React, QT

**Infrastructure:** Linux, Blockchain, Ethereum, Solana, Docker, IPFS, Redis, PostgreSQL, MySQL, AWS, Serverless, GCP, Netlify

**Tooling:** Hardhat, Anchor, Metamask, Phantom, Git, PyCharm, VS Code, Remix.