



EDUCATION

| Year | Degree/Exam | Institute | CGPA/Marks |
|------|------------------|------------------------------------|------------|
| 2025 | B.TECH | IIT Kharagpur | 8.40 / 10 |
| 2020 | AISSE (CBSE XII) | Shriji Baba Saraswati Vidya Mandir | 94% |
| 2018 | AISSE (CBSE X) | Shriji Baba Saraswati Vidya Mandir | 96.4% |

INTERNSHIPS

Software Engineering Intern | Awsmo Incorporated

Apr '24 - Present

- Streamlined ML workflow, achieving **55% faster execution** & **50% greater scalability** with **AWS Batch** & **CloudFormation**
- Enhanced **deployment efficiency by 100%** through **CI/CD** pipelines and **unit tests covering ~80%** of the code base
- Identified **17 bottlenecks** across all services via a **benchmarking framework** written in **Golang**, **Python**, and **Terraform**
- Optimized **time series data parsing by 40%** by implementing efficient business logic in the **Django REST Framework**
- Reduced **service downtime by 30%** via *post-deployment health checks* and *rollback mechanisms* in *deployment pipelines*

PROJECTS

Naarad

Jun '24 - Jul '24

- Deployed a **student-run noticeboard service** for IIT Kharagpur community, serving **over 7000 daily active users**
- Managed deployment on **Digital Ocean** with **Docker**, leveraging **GitHub Actions** for **CI/CD**, scaling for **over 15,000 users**
- Reduced **unauthorized access attempts by 30%**; **OTP** and **nginx** rules restrict only sign-up/sign-in to the **campus network**
- Integrated with **MFTP**, delivering students **real-time placement portal notices**, with a delivery delay of **under 3 minutes**

ApnaInsti

Jan '24 - Feb '24

- Published an **official mobile app for IIT KGP**, increasing **student involvement by 30%** in institute-organized activities
- Orchestrated deployment on **AWS EC2**, utilizing **CodeDeploy** and **CodePipeline**, scaled for **10,000+ users** with **AWS ECS**
- Designed **travel share** and **buy/sell portal**; spearheaded a team of **10 developers**, developing in **Django** and **React Native**
- Engineered a **real-time scoreboard** feature, serving **5000+ concurrent users**, using **Golang**, **PostgreSQL** and **WebSockets**

Metahub

Jan '23 - May '23

- Revamped a **PtokaX-based P2P file-sharing service** exclusive to IIT Kharagpur, catering **50TB+ of content** to **800+ users**
- Resolved compilation errors & a ban functionality bug, **increasing server stability by 30%** and ensuring a smooth installation
- Engineered **automation** and **monitoring** scripts, & set up **fallback** for uninterrupted server availability, ensuring **95% up-time**

GSYNC

Apr '22 - May '22

- Developed a **CLI tool for real-time file & folder synchronization** from local to remote git repositories, with **100% efficiency**
- Implemented **8 service functionalities** - start, stop, status, restart, enable, and disable, with **innovative selective start/stop**
- Elevated **user experience by 40%** with intuitive **logs management** and troubleshooting, with support for **macOS** and **Linux**

COMPETITION/CONFERENCE

Inter-IIT Tech Meet 12.0 | Contingent Gold

Nov '23 - Dec '23

- Secured first place for the third consecutive time, contributing to **cloud architecture**, **blockchain**, and **backend** tech stack
- Patched **2 Aptos library bugs** and designed a **novel Metamask Snap** allowing transacting **Aptos coin** via **Metamask Wallet**

POSITIONS OF RESPONSIBILITY

Maintainer | Metakgp, IIT Kharagpur

Aug '23 - Present

- Developed and maintained **over 20 open-source projects** for IIT Kharagpur students, easing out various stressful processes
- Published **IQPS**, a **Golang**, **PostgreSQL**, and **Svelte** app, hosting **500+ question papers** over **19 years** with **vector search**
- Deployed **Kronos**, a web app in **Python** that collects and analyzes **12,500+ records**, providing detailed **grade distributions**

Executive, FOSS United Club Lead | Kharagpur Open Source Society, IIT Kharagpur

May '22 - Jul '24

- Organised **over 15 workshops**, promoting and advocating the adoption of **open-source software** amongst the students
- Organised **Kharagpur Winter of Code** ('22 and '23), inspired by *Google Summer of Code*, with **1.2k+** and **2.5k+** participants

Technology Coordinator | Technology Students' Gymkhana, IIT Kharagpur

Jul '23 - Jul '24

- Oversaw **technological advancements** at IIT Kharagpur; assisted in resolving **over 200** student complaints every month
- Achieved a 90% reduction in site build size** by *migrating static data* to **PostgreSQL** using efficient **Python** & **Bash** scripts
- Migrated from **AWS** to **on-premise server**; leveraged **Proxmox** for **3-layered system design** and novel **CI/CD pipelines**

SKILLS AND EXPERTISE

Languages: Python, Golang, Bash, TypeScript, JavaScript**Frameworks:** Django, Flask, Go-Fiber, Node.js, Metamask Snaps**DBMS:** PostgreSQL, MongoDB, MySQL**DevOps:** Networking, Linux Administration, Docker, Nginx, Apache Web Server, Cloudflare, Terraform, Amazon Web Services (AWS), Digital Ocean (DO), Jenkins, Argo CD, YAML, GitHub Actions**Others:** Git, GitHub, GitLab, Proxmox, Backend Development, Web Browser Extension Development