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EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2025	M.TECH Dual Degree 5Y	IIT Kharagpur	7.82 / 10
2019	Class XII (CBSE)	Patrachar Vidyalaya	88%
2017	Class X (CBSE)	Bhagirathi Bal Shiksha Sadan	9.2 / 10

INTERNSHIPS

Software Development Intern | Awsmo Inc. | San Jose, California   **[Jan '24 - Present]**

- Developed the backend using **Django REST Framework** and **PostgreSQL**; implementing **40+** endpoints with comprehensive unit testing
- Implemented the frontend using **React** and **Redux**, integrating **react-chartjs** for real-time monitoring of **EC2** cost and utilization metrics
- Designed customer onboarding workflows, utilizing **boto3** and **IAM** policies for automated role assignment and permissions management

Software Engineer Intern | Trumio Inc. | San Jose, California   **[Sep '23 - Dec '23]**

- Engineered a **chat interface** for the **university project ecosystem** of Trumio, fostering smooth collaboration among students and clients
- Collaborated with design team to **enhance the chat UX**; Designed backend architecture to support the functionality of **CometChat SDK**
- Utilized **CometChat UI SDK** to integrate various functionalities, ensuring seamless alignment with backend for robust & **scalable** support

Software Development Engineer Intern | Covvalent | Gurugram   **[May '23 - Jul '23]**

- Built and integrated a **document conversion tool** with the project management portal, adapting technical documents for **client delivery**
- Utilized **RabbitMQ** for message queuing and **python-docx** library for document generation; catering conversion of **40+** documents daily
- Created **Chrome extension** scraping up to **10,000** global shipment data points hourly; automated **CSV file generation** under slow internet

PROJECTS

ApnaInsti | Central mobile application for all student activities | IIT Kharagpur   **[Oct '22 - Present]**

- Managed deployment on **AWS EC2** with **RDS** and **Docker**, utilizing **CodeDeploy** and **CodePipeline**, effectively scaling for **2000+** users
- Built features like **slot booking** and a **buy/sell portal**; led **7**-member team developing **Django REST** backend and **React Native** frontend
- Constructed the **feature roadmap** and oversaw the **system design** and **UI design**, driving the overall technical decision-making process

Live Bus Tracking Feature | ApnaInsti Mobile App | IIT Kharagpur   **[Jan '24 - Feb '24]**

- Developed a scalable backend as a service with **Go & WebSockets**, supporting **100,000+** simultaneous requests at **sub-second latency**
- Architected a highly concurrent system using Go's **goroutines and channels** optimizing real-time data streaming for **2,500+ users**
- Implemented **JWT WebSocket** authentication, ensuring **secure, low-latency** connections, supporting **100,000+ client** under stress testing

Project Ingress | Official Student Logging System | Central Library, IIT Kharagpur   **[Aug '23 - Jan '24]**

- Implemented backend using **Golang** for efficient **barcode-based** student **check-in/check-out** portal at the Central Library of IIT Kharagpur
- Constructed a user-friendly **React.js** frontend, facilitating **real-time visualization** of student details during **check-in/check-out** processes
- Executed on-premises deployment with **Docker Compose** for **Postgres**, frontend, and backend, ensuring secure &robust **logging service**

MFTP-WhatsApp | ERP Portal Notifications on WhatsApp | Self Project   **[Jun'22 - Aug '22]**

- Developed an application with **Node.js** to send CDC notices on WhatsApp using **whatsapp-web.js** library, receiving data with **express.js**
- Containerized the services using **Docker Compose**; further enhanced inter-service communication through **RabbitMQ** message queues
- Enhanced an existing project, **mftp by metaKGP**, to automate the retrieval and forwarding of notices to the application's API endpoints

SKILLS AND EXPERTISE

Languages: C++ | JavaScript | Python | TypeScript | Go **Developer Tools and Databases:** MongoDB | Docker | PostgreSQL | RabbitMQ
Infrastructure/DevOps: Linux | Git | AWS | Grafana | Redis **Frameworks and Libraries:** React.js | Express.js | Django | Node.js | Fast API

COMPETITION/CONFERENCE

Inter IIT Tech Meet 12.0 | University Project Ecosystem Challenge | Trumio | Solo Gold   **[Oct'23 - Dec '23]**

- Secured **Gold** among **20** participating IITs developing **Trumio's AI university project ecosystem** with a scalable **Python/FastAPI** backend
- Integrated over **12** features into backend within microservices architecture effectively with container orchestration using Docker Compose
- Applied **Redis caching**, optimizing endpoint response times & reducing server load, leading to **performance surge** in user interactions
- Deployed on **AWS Elastic Beanstalk** and **Amplify** with **CI/CD** pipelines; implemented monitoring using **Grafana, Prometheus, and Loki**

POSITIONS OF RESPONSIBILITY

Technology Coordinator | Technology Students' Gymkhana | IIT Kharagpur   **[Jun '22 - Mar '23]**

- Developed a utility for **automatic generation** and distribution of digital certificates, distributing over **4000** certificates for various events
- Implemented an **admin dashboard** for the official website, enabling multiple stakeholders to manage data for events and update results
- Assisted in resolving **100+** student complaints every month, addressing issues related to internet connectivity throughout the campus

Founder & Executive Head | Developers' Society | Technology Students' Gymkhana   **[Oct '22 - Mar '23]**

- Developed and documented the **Standard Operating Procedure (SOP)** to establish the purpose, structure and hierarchy of the society
- Coordinated and conducted technical assessment for **153** students, evaluating proficiency in **version control** and full-stack development
- Delivered **7** instructional sessions on web development covering **HTML/CSS, JavaScript and RESTful APIs** using **Express.js** and **Node.js**

EXTRA CURRICULAR ACTIVITIES

- Revamped and maintained the official website of Induction Program, organized events for **1800+** students as part of the Induction team
Open Source Contribution : Rocket.Chat
- Collaborated with the community in Rocket.Chat by contributing **4 pull requests** and raising **5 new issues** using **React.js** and **Typescript**
- Submitted a proposal for a Rocket.Chat app for integration of **Figma API** with the Rocket.Chat platform in **Google Summer of Code 2022**