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Examination	University	Institute	Year
Graduation	IIT Bombay	IIT Bombay	2026

PROFESSIONAL EXPERIENCE

Full Stack Developer Intern | Rsustain *[July'25-Aug'25]*
*Received a **Letter of Recommendation** from GSustain: Qatar's leading sustainability consultancy, 2nd Global Carbon verifier*
- Engineered a **carbon credit platform** with **Next.js** & **Supabase**, exposing **35 RESTful APIs** and sustaining **285+ req/sec**
- Implemented an **EPA/DEFRA-aligned emissions calculator** with unit conversions and a **Stripe backend** for transactions
- Built an **AI-assisted verification pipeline** using **GPT-4** architecture and **Puppeteer** to automate project review workflows
- Established **CI/CD quality** with **90+ Jest tests** covering unit, integration & also implemented **multi-tier rate limiting**

Software Engineer Intern | Asva AI *[May'25-June'25]*
*Earned a **Letter of Recommendation** for contributing to the company's AI search project featured in **The Economic Times***
- Engineered a **GEO pipeline** using **NLTK** and **OpenAI GPT-4** for query/FAQ generation across **4 AI-readiness dimensions**
- Built an automated **SEO** & AI-readiness audit system with **FastAPI** & **Selenium**, running **15+ checks** with LLM reports
- Built an **AI referral analytics dashboard** using **Next.js 14** and **Express.js**, integrating **GA4**, **OAuth 2.0**, & **5-min cache**

Backend Engineer Intern | ReFab *[Mar'25-Apr'25]*
Mobile logistics app for nationwide fabric sourcing, pickup management, and warehouse delivery
- Developed **scalable Flutter** logistics app with **Firebase Firestore** backend, supporting **6** distinct roles with **real-time** sync
- Architected **Repository pattern** data layer in **Dart**, reducing duplication and enabling **unit testing** across **45+** methods
- Integrated Flutter client with **Next.js** admin dashboard via shared **NoSQL** Firestore collections, enabling **sub-second** sync
- Built **event-driven** order lifecycle management with **cascading updates** & structured **audit logging** across **4** linked entities

KEY PROJECTS

Automated Contact Angle Measurement | Supervised Learning Project *[Aug'25-Dec'25]*
Guide: Prof. S. Mallick — Developing a Computer Vision app with a PhD researcher for a semester-long course project
- Optimized costs from **goniometer** (Phoenix, **INR 2M**) to **Flutter** app with printed setup (**INR 5k**) for sessile drop analysis
- Implemented **computer vision** pipeline using **Gaussian blur**, **Sobel gradients**, **flood-fill**, morphological closing operations
- Built **Kåsa least-squares** circle fitting and **cubic polynomial** tangent calculation with bootstrap resampling for **95% CI**

Profectus Internship Portal | Abhyuday *[May'24-Jun'24]*
A platform that offers youth an opportunity to work with NGOs & social startups, making a real and meaningful impact
- Automated the internship hiring platform with a **MERN stack portal**, handling **1000+** applicants and placing **700+** interns
- Built **company portal** for candidate review, saved **20+ hours** per hiring cycle with OTP, **JWT**, **RBAC**-based secure access

Real Time Chat Application *[May'25]*
Backend Project | Self Project
- Built a low-latency chat platform (<**50 ms**) for 1:1 & group chats with offline delivery using **Socket.IO** and **MongoDB**
- Designed WebSocket architecture with **Redis Streams**; secured via **JWT** refresh tokens, bcrypt, and pre-signed **S3** uploads
- **Dockerized** and deployed on **AWS EC2** with **Nginx caching** and **Prometheus/Grafana** monitoring, serving **300+** users

POSITIONS OF RESPONSIBILITY

Web Manager | Abhyuday, IIT Bombay *[Apr'24-Mar'25]*
*Asia's largest student-run social body for Leadership & Impactful change | Patronage:**UNICEF, PETA** | Impact: **100K+***

Web & Technical	• Developed **5+** full-stack web platforms and built admin dashboards with **Django** to management • Integrated **OAuth 2.0** for authentication, optimized **SEO**, and leveraged **AWS EC2** for deployment • Built a **CR portal** engaging **350+** colleges and **3K+** students with tasks, leaderboard, & incentives
Leadership	• Led a team of **800+** volunteers, managing strategic execution for **50+ events** and **80+ campaigns** • Led Powai Lake Cleanup along with **UNICEF** including **400+** volunteers collecting **3K+** kgs of trash

EXTRACURRICULAR ACTIVITIES

Coding	• Achieved **Codeforces** rating of **1270** and solved 400+ DSA problems on LeetCode, CSES, GFG *[2025]* • Awarded **Letter of Recommendation** by **Prof. Archak** for managing **3+** Engineering websites *[2025]* • Secured **1st** position in Techfest CoDecode, a national CodeChef contest for India's top coders *[2025]*
Technical Skills	• **Programming Languages:** C, C++, Python, Dart • **Web Development:** Node.js, Supabase, Django, Stripe, MongoDB, Tailwind CSS, REST APIs • **Tools:** Github, Jest, Arduino IDE, Selenium, Android Studio, AWS, Firebase (Auth, Firestore)
Mentoring	• Served as **class representative**, catering to academic & non-academic needs of **120+** batchmates *[2024]* • Conducted an Open Day for **400+** students from **10+** schools as part of **IOE outreach program** *[2024]*
Tech Teams	• Received **Faculty Advisor's Recommendation** for work as Web Developer in **Mars Rover Team***[2023]* • Led funding, operations & web development as Business Subsystem Member of **Exofly** drone team *[2023]*