Ambadas Laxman Joshi

Final Year Undergraduate
Department of Aerospace Engineering

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in Ambadas Joshi

ACADEMIC QUALIFICATIONS

Year	Degree/Certificate	Institute	CPI/%
2022 - Present	B.Tech.	Indian Institute of Technology Kanpur	7.30 /10
2022	Maharashtra State Board(XII)	Vidya Valley Northpoint School	76.2%
2020	Maharashtra State Board(X)	MSS High School & Junior College(Mate Shala)	93.3%

PROFESSIONAL EXPERIENCE

Backend Developer Intern | *CampusHaat*   *June'25–Aug'25*

Objective	• Built a **data analysis dashboard** enabling the founder to gain business insights for **data-driven decisions**
Approach	• Developed backend APIs using **Express.js** with **MySQL integration** for efficient data flow management • Integrated **controllers** and **routes** to fetch and also process team-provided queries for **dashboard insights** • Integrated a **responsive Next.js frontend** with **Shadcn library** to truly **enhance data visualisation**
Impact	• Developed an **interactive dashboard** for dataset exploration, providing insights to support business needs

Software Developer Intern | *Frupple*   *July'25–Aug'25*

Objective	• Integrated **Google Analytics** and **Google AdSense** to track publisher performance and enable insights
Approach	• Implemented **Google OAuth** with **NextAuth.js** to securely handle user sign-in and verify **JWT** tokens • Developed custom code for **Google AdSense** and **Analytics** integration to ensure **secure connectivity** • Fixed recurring backend storage bugs in **PostgreSQL** and **SQLAlchemy ORM** to improve reliability • Resolved critical post-deployment issues and significantly enhanced UI using **Next.js 14** and Tailwind CSS
Impact	• Delivered a **secure integration system** that improved **analytics flow, sign-in and platform stability**

KEY PROJECTS

AI Resume Analyzer | *Self Project* ⓞ   *Jan'25*

- Build AI-powered resume app with **OCR** (Google Vision) for text extraction and **OpenAI API** scoring, ranking & analysis
- Applied preprocessing (noise removal, normalization, tokenization) for **structured NLP input** and accurate skill detection
- Designed backend with **Express + MongoDB** and built a responsive Next.js/Tailwind UI for interactive analytics & feedback
- Automated deployment via **Docker + CI/CD**, ensuring reliable builds, testing, monitoring, logging, and scalable cloud release

Banking System | *Self Project* ⓞ   *Mar'25*

- Built a **C++** banking system that fully supports account creation, deposits, withdrawals, transfers, and history with **OOPS**
- Applied **SOLID** principles, exception handling, **RAII**, and design patterns for maintainability and essential validations
- Implemented file-based **persistent storage** with audit logs, ensuring recovery, consistency, and full transaction traceability
- Developed an **interactive CLI** with authentication, PIN checks, and role-based access to simulate secure real-world banking

Insurance Application Backend | *Uniqover*   *Jul'25*

- Built a secure backend to manage **insurance applications**, validating requests and storing approved entries in **MongoDB**
- Designed a modular **REST API** with **Express.js 5**, using **Mongoose schemas** with constraints to ensure data consistency
- Implemented centralized **error handling** with **custom error codes**, standardized **API responses**, and async wrappers
- Streamlined deployments with configuration management and modular components, ensuring scalability, error traceability

Companion Arbiter PUF | *CS771 Course Project — Prof. Purushottam Kar, IIT Kanpur*   *Jan'25-April'25*

- Mathematically demonstrated vulnerability of a **Physically Unclonable Function** to decryption using a **linear classifier**
- Enhanced accuracy to **99.3%** and reduced training time to **1.99s** by engineering **528** features from the original **32** features
- Examined efficacy of **LinearSVC** and **LogisticRegression** models by optmising **hyperparameters** like tol, loss and penalty
- Conducted experiments on benchmark PUF datasets, evaluating scalability, robustness, and generalization of trained models

TECHNICAL SKILLS

Programming Languages	C, C++, Python, JavaScript, SQL, Java
Web & Backend	HTML, CSS, Node.js, Express.js, REST APIs, MongoDB, MySQL
DevOps & Cloud	Docker, Git & GitHub, GitHub Actions (CI/CD)
Software Tools	MongoDB Compass, Postman, VS Code, Jupyter Notebook

RELEVANT COURSES   **ongoing course*

• Fundamentals of Computing I & II	• Linear Algebra	• Ordinary Differential Equations
• Data Structures & Algorithms	• Single & Multivariable Calculus	• Partial Differential Equations
• Computational Methods*	• FEM for Fluid Dynamics*	• Introduction to Machine Learning

POSITIONS OF RESPONSIBILITY & EXTRACURRICULARS

- Mentored 6 enthusiastic freshmen during Orientation'23, ensuring smooth academic, social, and cultural transition at IIT.
- Led a creative Hall XII team of 20+ members in Galaxy'24 drams competition, fostering collaboration, creativity, and spirit.
- Actively participated in Galaxy'23 Nukkad Natak, showcasing acting skills before a diverse audience, placed an impressive **3rd**.
- Acquired discipline, leadership, fitness and resilience through rigorous **NCC training** under the guidance of the army.