

# Deepak

Passionate Data Scientist  
B.Tech- Data Science & Artificial Intelligence  
Indian Institute Of Technology, Bhilai  
EDUCATION

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**Indian Institute of Technology, Bhilai**  
B.Tech in Data Science & Artificial Intelligence

Graduation: 2026

## Experience

**Head, Student Suggestion Forum – CoSA, IIT Bhilai 2024–25** [Certificate Link](#)

Led a student-driven forum to address academic, hostel, and campus concerns.  
Acted as a bridge between students and administration, resolving issues for the wider student community.

**Head, Management Committee – CoSA, IIT Bhilai 2024–25** [Certificate Link](#)

Managed and coordinated a large team of student coordinators and volunteers.  
Oversaw planning and execution of cultural programs, college fests, and other institute-wide activities.

**MERAZ Informals Convener- IIT Bhilai's annual cultural and technical fest** [Certificate Link](#)

Directed planning, resource allocation, and execution of the institute's annual cultural and technical fest.  
Coordinated cross-functional teams to deliver large-scale events successfully.

## Internship

**Machine Learning Research Intern| IIT Bhilai** Feb 2025 – Jun. 2025 [Certificate Link](#)

Fine-tuning a legal domain AI chatbot using **large language models** and curated Indian legal datasets.  
Scraped legal data from multiple sources and converted unstructured content into clean **QA** format using Python and JSON preprocessing.  
Executed model training on and NVIDIA RTX A5000 (24GB) GPU with checkpointing and memory optimization.

**Data Science Intern | Encryptix** 25 May to 25 June, 2024. [Certificate Link](#)

Worked on an end-to-end data science pipeline, including **data scraping**, cleaning, analysis, and **visualization** using Python and relevant libraries.  
Performed feature engineering and built predictive models using **Random Forest** and Gradient Boosting techniques.  
Evaluated model performance using metrics like accuracy, precision, and **ROC-AUC**.  
Tools Technologies: Python, Pandas, Matplotlib, Seaborn, Scikit-learn, AWS EC2/S3

## Projects

• **Invoice Extraction Using LLaMA 3.2 Vision Model**  
[Live Demo](#)

Aug. 2024 – Nov. 2024  
Github

Developed an AI-powered invoice extraction system using **LLaMA 3.2 Vision Model** and **Groq API** for OCR-based text extraction.  
Built a Streamlit-based web app that processes invoice images and exports structured data in **JSON & CSV** formats.  
Designed robust data validation pipelines using Pydantic, ensuring clean and correctly formatted invoice details.  
Implemented batch processing for multiple invoices via ZIP file uploads, enhancing scalability and efficiency.  
Successfully deployed the application on Render, making it accessible online for real-world usage.

**Fine-Tuning LLM on Telecom Q&A Dataset (BLEU Score: 0.43)**

Jul 2024 – Sept 2024

Github

Fine-tuned the **LLaMA2-7B** language model on domain-specific **telecom Q&A** datasets to improve response accuracy and user experience.  
Used QLoRA (via PEFT) for parameter-efficient fine-tuning and LoRA to reduce training overhead while maintaining model performance.  
Achieved a BLEU score of 0.43 and evaluated the model using ROUGE metrics.  
Technologies: Python, SFT, QLoRA, LoRA, ROUGE, BLEU.

## Technical Skills

- Programming & Scripting Languages:** Python, C++, SQL, HTML, CSS
- AI/ML & LLM Frameworks:** PyTorch, Hugging Face, Scikit-learn, OpenCV, Matplotlib, NumPy, Pandas.
- Databases & DevOps:** MongoDB, Git, Docker, Linux, REST APIs
- Soft Skills:** Teamwork, Event Management, Technical Presentations
- Non Technical:** Event Management\*, Team Work, Presentation Skills\*

\* Elementary proficiency

## Achievements

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- **JEE Advanced 2022**, Secured **Top 2 %** in JEE(Advanced), Joint Entrance Examination for IITs *2022*
- **JEE Mains 2022**, Secured **qualified** among 1.3 million candidates appearing for the test *2022*

## Extracurriculars

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- **Student Volunteer**, Student Mentorship Program (SMP) IIT Bhilai
- **Coordinator**, Meraz 4.0 Informals, Event IIT Bhilai

## All certifications are attached

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