

# Deepak

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

+91-9760843775  
deepakde@iitbhilai.ac.in  
deepsingh010104@gmail.com  
Github | linkedin.com

## EDUCATION

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

Expected 2026  
CGPA: 6.64/10.0

## Projects

- Invoice Extraction Using LLaMA 3.2 Vision Model** *Aug. 2024 – Nov. 2024*  
*Live Demo* [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.
- ZeroShot Text-to-Image Generator** *Jun. 2024 - may. 2024*  
[Github](#)
  - Developed a deep learning model for generating high-quality images from textual descriptions using Stable Diffusion.
  - Integrated a transformer-based text encoder with GANs for zero-shot text-to-image synthesis.
  - Optimized image generation pipeline using CLIP ViT-L/14 encoder, U-Net, and VAE with OpenVINO.
  - Achieved semantic consistency and high FID scores, enabling realistic outputs.
  - Deployed a prototype on Hugging Face for real-time testing and interactive user demos.

## Technical Skills

- **Programming & Scripting Languages:** Python\*, C++,SQL, HTML, CSS
- **Tools Libraries::** Git,Pytorch,Tensorflow,Scikit-learn,Keras,Matplotlib,MySQL,OpenCV,Linux,Docker
- **Non Technical:** Event Management\*, Team Work, Presentation Skills\* *\* Elementary proficiency*

## Work Experience & Internship

- Computer Vision Intern | IIT Bhilai Under by Dr. Nitin Khanna** *May. 2024 - Jul. 2024*

Collaborated on crater detection using the Segment Anything Model (SAM) and YOLOv8 to enhance accuracy and efficiency.

Applied advanced deep learning techniques for precise segmentation and recognition of craters in planetary imagery.

Focused on optimizing model performance for universal applicability across diverse terrains.
- Intern(Data Science)| Encryptix** *May 2024 - Jun. 2024*

Data preprocessing, feature engineering, model building, and evaluation with Random Forest and Gradient Boosting.

Deployed models on AWS (S3, EC2)

## Positions of Responsibility

- **Head** ,of Student Suggestion Forum, IIT Bhilai *Apr. 2024 - present*
- **Head** , of Management Committee CoSA 2024-25 IIT Bhilai *Apr. 2024 - present*
- **Member**,of DesignX Club, IIT Bhilai *May. 2023 - Mar . 2024*

## Achievements

- **JEE Advanced 2022**, Secured **Top 1 %** in JEE(Advanced), Joint Entrance Examination for IITs *2022*
- **JEE Mains 2022**, Secured **qualified** among 2.2 million candidates appearing for the test *2022*

## Extracurriculars

- **Student Volunteer**,Student Mentorship Program (SMP) IIT Bhilai
- **Cordinater**, Meraz 4.0 Informals, Event IIT Bhilai
- **Convenor**, Meraz 5.0 Informals Convenor, IIT Bhilai