



# Adarsh Kumar Bhardwaj

Roll No.: 2022ug3020

B. Tech

CSE (with DS and AI)

Indian Institute Of Information Technology, Ranchi

+91-8789553997

adarsh.2022ug3020@iiitranchi.ac.in

adarsh20221217@gmail.com

/AdarshBh

/in/adarsh-bhardwaj

## EDUCATION

### Indian Institute of Information Technology Ranchi

2026

B.Tech in Computer Science and Engineering (with spec. in DS and AI)

CGPA : 8.44

## TECHNICAL SKILLS

**Languages:** Python, SQL, Linux

**Developer Tools:** Git, GitHub, Docker, n8n

**Frameworks:** TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Hugging Face Transformers, LangChain, Gradio, Streamlit, Flask

**Cloud/Databases:** Render, MySQL, Pinecone, FAISS, AWS (S3, EC2, Lambda, SageMaker)

**Coursework:** Machine Learning, Deep Learning, Natural Language Processing, Large Language Models, Retrieval-Augmented Generation (RAG), MLOps, Data Visualization

## PERSONAL PROJECTS

### HealthGuide-Chatbot

July 2025

Tools: Python, Langchain, Pinecone, Gemini API, Flask

- Designed and implemented an AI-powered medical chatbot capable of retrieving relevant health information from a 637 page medical knowledge base using **RAG (Retrieval-Augmented Generation)**.
- Built the data ingestion pipeline, including document parsing, chunking, and embedding storage in **Pinecone** for efficient semantic search.
- Integrated **Gemini API** with a Flask backend for dynamic response generation with custom prompt tuning for short/long-form answers based on query complexity.

### Hindi-Article-Summarizer

June 2025

Tools: Python, PyTorch, Hugging Face, Gradio, LLM

- Developed an end-to-end model for summarizing Hindi news articles containing technical terms in English, using the **ILSUM Hindi-2024** dataset with over 10k training and 1.5k+ validation samples.
- Fine-tuned the **IndicBART** model from Hugging Face and deployed it on Hugging Face using a **Gradio**-based interface and web app.
- Final result of finetuning contains Rouge1 score of **0.50+**.

### EcoDetect-CNN Classifier

May 2025

Tools: Python, TensorFlow, Kaggle, CNN, ResNet50, Hugging Face

- Developed a deep learning image classification model using **ResNet50** as convolutional base for waste segregation. Optimized for efficient inference and scalability, enabling seamless identification of biodegradable and non-biodegradable waste.
- Trained on 6,600+ images, including 1,700 augmented images using **ImageDataGenerator** for better generalization.
- Achieved more than **95%** accuracy on the test dataset after 10 epochs.
- Deployed the model on Hugging Face and integrated it into a Flask web application for real-time classification.

## CERTIFICATION

### Complete Data Science, Machine Learning, DL, NLP Bootcamp- by Krish Naik

July 2025

- Comprehensive training covering Data Science, Machine Learning, Deep Learning and NLP
- Gained hands-on experience in Python, TensorFlow, PyTorch, Scikit-learn, NLP pipelines and real-world projects.