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## **EDUCATION**

## • National Institute of Technology, Patna

2023-27

B. Tech in Electronics and Communication Engineering

CGPA: 8.54

#### **PROJECTS**

# • AI Chatbot with Gemini API: Intelligent AI Assistant

Tools: Python, Tkinter, Gemini API, FPDF, Requests, JSON

- Designed an AI assistant using Gemini API to provide intelligent responses based on user prompt.
- Implemented GUI for interaction and note taking from the API response.
- Added customizable bot presets with an option for users to define their own AI personas.
- Created a notes-saving feature allowing users to store and export interactions as a PDF.

## • Movie Review Classifier: Sentiment Analysis using ML/DL

Tools: Python, Scikit-Learn, TensorFlow, NLP, Logistic Regression, Random Forest, Neural Networks



- Developed a sentiment analysis system to classify movie reviews as positive or negative.
- Equipped multiple models (Linear SVC, Random Forest, Logistic Regression, Neural Network)
- Evaluated models and achieved an accuracy of 88.05% with neural networks.

# • Face Mask Detection: Deep Learning-based Mask Classification System

Tools: Python, TensorFlow/Keras, OpenCV, NumPy, Matplotlib, Scikit-Learn



- Developed a DL model using a CNN to detect whether a person is wearing a mask.
- Implemented data augmentation techniques to improve model generalization and accuracy.
- Optimized the model using batch normalization and dropout regularization.
- Determined the model using accuracy (90%+), precision, recall, and F1-score metrics.

## SKILLS AND INTEREST

- Programming Languages: C/C++, Python, JAVA, HTML, CSS, JavaScript, SQL
- Technologies: Machine Learning, Deep Learning, NLP, Data Preprocessing, Model Evaluation
- Frameworks: Numpy, Pandas, Matplotlib, TensorFlow, Scikit-Learn, Keras, Seaborn, Tkinter
- Tools: Visual Studio Code, Jupyter Notebook, Git, Github
- Libraries: Hugging Face, LLaMA, Gemini API, Streamlit, Flask
- Interests: Competitive Programming, AI/ML, DBMS, Data Structures & Algorithms

# CERTIFICATIONS

• Machine Learning Specialization, Stanford University

View Certificate

• Advanced Learning Algorithms, Stanford University

View Certificate

• Ubuntu Linux for beginners, Udemy

View Certificate

• GIT, GitLab, GitHub, Udemy

View Certificate

• Building LLM Powered Apps, Udemy

View Certificate

# ACHIEVEMENTS

- Attended DevFest 2023 by Google Developer Group, exploring cloud computing and AI innovations.
- Participated in Byteverse 7.0 hackathon, organised by NIT Patna(Team:- Byte Brigade).
- Ranked in the top 450 out of 20000+ applicants in ATF 2024, reaching the final interview round.
- Achieved a CodeChef rating of 1540+ in contests with 500+ problems solved (2 star).
- 5-Star Badge @Hackerrank in Python

## Positions of Responsibility

• Contributor, GirlScript Summer of Code

July 2025

• Member, IEEE, SB, NITP

Jun~2025

• Scholar, Reliance Foundation

Jan 2024