

# Indrayani

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## SUMMARY

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Aspiring AI engineer with a strong foundation in generative AI and large language models, dedicated to leveraging advanced technologies to create impactful solutions for social good. I have worked on AI projects aimed at social impact in the public sector, committed to addressing societal challenges through innovative applications and collaborative initiatives.

## EDUCATION

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### NORTHEASTERN UNIVERSITY

Master of Science in Computer Software Engineering **GPA: 3.5**

Relevant Coursework: Web Development, Web Design and Frontend Development, Database Design, Algorithms

Boston, MA, USA

Expected May 2025

### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

Bachelor of Technology in Computer Science **GPA: 3.8**

Relevant Coursework: Data Analysis, Artificial Intelligence, Data Science, Software Engineering, Operating Systems, Algorithms

Hyderabad, TG, INDIA

Jul 2019 - Jul 2023

## TECHNICAL SKILLS

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**Languages:** Python, Java, C++

**Generative AI & LLMs:** LangChain, GPT-4, Transformer models, OpenAI API

**DataScience & ML:** TensorFlow, Keras, PyTorch, Scikit-learn, NumPy, Pandas, XGBoost

**Database:** Oracle SQL, MySQL, MongoDB, PostgreSQL, Redis

**Cloud & DevOps:** AWS (EC2, S3, SageMaker), Docker, Git Actions CI/CD

**Web Technologies:** React.js, Next.js, Node.js, Redux, Express.js

**Tools:** Jira, Github, Microsoft Office, Excel

## WORK EXPERIENCE

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### VIRTUSA

Software Engineer Intern

Hyderabad, TG, INDIA

Jan 2023 – Aug 2023

- Built an internal application using **Python** for data analysis and backend processes, **Pandas** for data manipulation, and **React.js** with **Chart.js** for frontend visualization. Integrated **AI and machine learning algorithms** to forecast trends and analyze core business KPIs (e.g., Monthly Recurring Revenue), saving 10 hours per week of manual reporting work.
- Automated the code review process by integrating with **Microsoft Teams**, streamlining team collaboration and improving review efficiency by 80%
- Collaborated with cross-functional teams to identify and address bottlenecks in workflows, resulting in a 20% increase in overall team productivity.
- Presented technical findings and solutions to stakeholders, effectively communicating complex concepts to both technical and non-technical audiences

### STREET CAUSE(NGO)

Technology Volunteer

Hyderabad, TG, INDIA

Oct 2019 – Jul 2023

- Developed an AI-powered Virtual Mental Health Counselor using natural language processing to provide personalized therapeutic support to individuals seeking mental health care.
- Built a Python-based system to analyze data from community outreach activities, providing insights into volunteer participation and project impact.

## UNIVERSITY PROJECTS

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### GENERATIVE AI RAG PROJECT: DRIVING RULES & REGULATIONS ASSISTANT

- Developed a generative AI retrieval-augmented generation (RAG) application using **Python, LangChain, GPT-4 and Streamlit** that interprets user queries about driving rules and provides accurate, contextually relevant responses using a comprehensive driving manual.

### PREDICTING TERM DEPOSIT SUBSCRIPTIONS

- Developed and implemented classification models using **Decision Tree, Logistic Regression, and Random Forest** algorithms to predict customer subscription to term deposits, improving model accuracy by 95%.
- Leveraged customer data from bank marketing campaigns to analyze key features influencing customer decisions, driving targeted marketing strategies.

## **SENTIMENT ANALYSIS - RESTAURANT REVIEWS**

- Designed and implemented **NLP**-driven sentiment analysis with 92% accuracy on over 500,000 reviews using **Python and VADER**, showcasing expertise in natural language processing and analytical skills
- Optimized data processing workflows, achieving a 20% increase in efficiency, and demonstrated proficiency in technical skills and data management within an ML context

## **PREDICTION OF HOUSE PRICES**

- Analyzed and predicted house prices using various features from the Inncity house price dataset, applying machine learning models such as Regression and Ensemble techniques.
- Implemented grid search algorithm to optimize hyperparameters, improving model accuracy and performance in house price prediction.

## **ANTI FRAUD DETECTION MODEL**

- Achieved 97.71% accuracy in fraud detection using a deep learning model on the Lending Club dataset, demonstrating exceptional analytical and machine learning proficiency
- Enhanced data preprocessing efficiency by 20%, employing techniques like Random Forest imputation and SMOTE for imbalance correction, showcasing innovative problem-solving skills
- Led to a 30% reduction in false positives compared to traditional fraud detection models, markedly improving the efficiency and reliability of Internet loan fraud detection

## **LEADERSHIP EXPERIENCE**

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**Tech for Good:** Launched a club at Jawaharlal Nehru Technological University to host workshops and hackathons focused on creating technology solutions for local community challenges.