RAJASEKHAR NAIDU CHINNAPOTHULA

https://www.linkedin.com/in/chinnapothula-rajasekhar-naidu-/ https://github.com/CRajasekhar3182

craja62002@gmail.com | +91 6302723726

Professional Summary

Results-driven Data Science professional with expertise in Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), and Generative AI (GenAI). Highly skilled in developing predictive models, implementing deep learning architectures, and deploying AI solutions using TensorFlow, Keras, PyTorch, and Streamlit. Extensive experience in applying exploratory data analysis (EDA), data visualization, and predictive analytics to solve real-world challenges. Passionate about leveraging data and AI to drive impactful decisions and continuously evolving with cutting-edge technologies.

Technical Skills

- o AI & Machine Learning: Deep Learning, Neural Networks (ANN, RNN, CNN, LSTM, GRU), Transformers, Attention Mechanisms, Backpropagation, Gradient Descent Optimization (Stochastic, Mini-batch, Adam), Vanishing Gradient Problem
- Natural Language Processing (NLP): Tokenization, Lemmatization, Stemming, Word Embeddings, Named Entity Recognition (NER), Part-of-Speech Tagging
- o **Machine Learning Algorithms**: Linear Regression, Logistic Regression, Decision Trees, K-Nearest Neighbors (KNN), Random Forest, Support Vector Machines (SVM), Clustering (K-Means, DBSCAN)
- o Deep Learning Frameworks: TensorFlow, Keras, OpenAI GPT Models, GenAI, Transformers
- o Tools & Technologies: Streamlit, Power BI, Tableau, Git, SQL, MySQL, Pandas, NumPy, Matplotlib, Seaborn, Opencv2
- Other: GitHub, Visual Studio Code, HTML, CSS, JavaScript.

Work Experience

Data Science Intern | Coincent | Bangalore:

April 2023 –June 2023

- o **Salary Prediction Model:** Developed and optimized a predictive model using Python and Machine Learning, achieving 83% accuracy and showcasing technical proficiency in predictive modeling.
- Data Analysis & EDA: Conducted Exploratory Data Analysis (EDA) to uncover critical patterns, improving model performance by 20% and demonstrating strong analytical skills.
- Efficient Data Handling: Streamlined data preprocessing by 60% with optimized pipelines in Pandas, reducing model training time by 30% and enhancing efficiency.
- o **Full-Stack Integration & Visualization:** Integrated MySQL databases with HTML and CSS to create interactive Streamlit applications; presented findings through Power BI dashboards, boosting stakeholder engagement by 40%.

Data Science with Python Intern | Sun square technologies | Nellore, Andhra Pradesh:

Feb 2023 - April 2023

- Technical Proficiency in Python & Machine Learning: Gained hands-on experience in Python programming and foundational Machine Learning concepts, reinforcing a strong technical foundation for data science. Developed practical skills in data manipulation and enhanced database management capabilities using MySQL for complex data extraction and analysis.
- O Data Visualization & Communication Skills: Successfully executed a project involving data visualization with Matplotlib, effectively communicating analytical insights and showcasing proficiency in presenting finding.

Academic Projects

GenAI Document Analysis and Sentiment Analysis

- Built a Generative AI (GenAI) model for document analysis, utilizing NLP techniques to extract key information from large documents.
- o Developed a Sentiment Analysis model using Airjet Twitter data to classify sentiments of tweets, demonstrating expertise in text classification and NLP techniques.

SmartTech Co. Laptop Price Prediction & Analysis

- Developed a Laptop Price Prediction model using Machine Learning algorithms (Linear Regression, Decision Trees) to predict the price of laptops based on features like specifications, brand, and market trends.
- O Deployed the project as a **Streamlit** app for interactive analysis and prediction.

 <u>Live App: SmartTech Laptop Price Prediction</u>

RAG Model – Personal Chatbot for Naresh IT

Developed a **Retrieval-Augmented Generation (RAG)** model for a personalized chatbot to interact with users based on institute data, demonstrating advanced knowledge in **NLP** and **machine learning**.

Live App: Naresh Institute Chatbot

YOLOv3 Object Detection (Computer Vision)

Built and deployed an **object detection system** using **YOLOv3** to detect and classify objects in images. Live App: YOLOv3 Object Detection

Education

B.Tech in Electronics and Communication Engineering

AUG 2020 -May 2024

KSRM COLLEGE OF ENGINEERING (Affiliated with JNTUA)

O Maintaining an 90% academic score.

Certificates

- o Introduction to Data Science | CISCO
- $\circ \quad Python \ | \ HackerRank$
- o Basic Python | Great Learning
- o SQL | HackerRank

Leadership & Engagement

- Academic & Coding Achievements: Ranked 1st four times and 2nd once in various competitions. Won 1st place in ML Model Preparation & Presentation at KSRM-Kadapa Alumni 2023 and actively participated in coding challenges at SV University and Kaggle.
- Cricket Leadership: Captained the Kadapa district cricket team, fostering teamwork and strategic thinking through sports leadership.
- o Class Representative (CR): Showcased leadership and communication skills while co-ordinating with peers and faculty.