Komal Soni

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Experience

- **Engineer, Target** Aug 2022 - Present

  Spearheaded the development and deployment of advanced machine learning models within web applications (React.js), resulting in enhanced functionality and user experience.

  Successfully implemented cutting-edge time series algorithms, including FB Prophet and Isolation Forest, to significantly improve anomaly detection and forecasting accuracy by 23%. Reduced MTTD to less than 5 minutes, contributing to improved system reliability and performance.

- **Product Development Intern, intellimation.ai** Dec 2021 - Mar 2022

  Developed an NLP model for fintech applications, including the processing and annotation of over 10,000 emails. The model involved training predictive algorithms to enhance automated workflows, resulting in a significant reduction in manual effort.

  Proficiently utilized industry-standard tools such as Prodigy, Spacy, NLTK, NumPy, and Pandas to ensure the successful implementation and optimization of the NLP model for efficient and effective fintech solutions

Education

- **M Tech, Artificial Intelligence and Machine Learning, BITS Pilani** 2023 - 2025
- **B Tech, Computer Science, HITAM** 2018 - 2022

Licenses & Certifications

- **IBM Machine Learning Professional Certifications - Coursera**
- **Python 3 Programming Specialization - Coursera**
- **Applied Data Science with Python, Level 2 -IBM**
- **Data Science for Engineers - NPTEL**
- **Google Cloud Platform Specialization - Coursera**
- **Fundamentals of Deep Learning for Computer Vision NVIDIA**

Skills

Python • PL/SQL • Data Analysis • Data Visualization • Data Science • Machine Learning • NLP • Deep Learning • Flask • React.js • MongoDB • HiveQL • GoLang

Research Paper Publications

- **IJARESM:** "Asymmetric Encryption" Jul 2022
- **IEEE:** "Bitcoin Price Prediction - An Analysis of Various Regression-Based Models" Jun 2022
- **SPIEIC:** "AI-Based Prediction of Rainfall from Satellite Observation for Disaster Management" Nov 2020

Projects

- **Apparel And Accessory Demand Transfer** Mar 2023

  Employed a combination of machine learning and NLP methodologies to provide actionable recommendations for optimizing assortment decisions and driving sales growth in the apparel and accessory retail industry.

  Utilizing the K-Nearest Neighbors algorithm, to cluster the dataset into 80 groups based on product attributes and sales patterns the utilized Natural Language Processing techniques to analyze the sales impact of the top 10 products within each cluster, considering product descriptions.

- **Email Parser And Summarizer** Jun 2022

  Designed and implemented an email parser and summarizer web application using Streamlit that saves users 10-50 minutes on average by summarizing their emails.

  Utilized SMTP for email access, NLP techniques for email summarization, and Streamlit for web development.

- **Bitcoin Price Prediction** May 2022

  Conducted an extensive research study, assessing the performance of 11 diverse regression-based models for predicting Bitcoin price fluctuations over a 24-hour time horizon.

  Demonstrated exceptional expertise by achieving a remarkable accuracy rate of 99.182% through the utilization of the Bayesian Ridge Regression model.

- **Cloud Bowl Microservice Game** Oct 2021

  Developed a competitive fighting bot that achieved 16th position out of a field of over 300 competing bots. Employed microservices on the Google Cloud Platform to ensure robust and scalable performance.

  Implemented real-time data collection of other bot positions using JSON and leveraged a microservices architecture to efficiently deploy the bot on the Google Cloud Platform during a prestigious GDC serverless hackathon event.

- **AI-Assisted Farming Application** Aug 2021

  Leveraged a diverse array of IBM cloud services, including the Node-RED application, Watson Studio, AutoAI, and IBM Machine Learning, to devise a sophisticated model and user interface.

  Demonstrated exceptional proficiency by achieving a remarkable accuracy rate of 91.1% through the adept utilization of the LGBM classifier and Snap Boosting Machine regressor, further enhancing the precision of the crop recommendation and revenue prediction system.