

Nisha Choudhary

nishachoudhary164@gmail.com

9468978278

Bhilwara, Rajasthan

Summary

Innovative Programmer Analyst with a forte in Python, GenAI, Machine Learning, Deep Learning, and NLP, consistently delivering data-driven strategies that address complex business issues.

Experience

Programmer Analyst

Cognizant • Gurgaon, Haryana

07/2022 - Present

Real-time Guest Profile Curation Pipeline for Resort LA

- **End-to-End GenAI Solution Development:** Led the design and implementation of a comprehensive Generative AI project for Resort LA, focusing on real-time guest profile curation to enhance personalization and guest experience.
- **Data Extraction and Integration:** Developed a robust pipeline for extracting and integrating guest data from Snowflake, including critical attributes such as Name, Location, and Company, ensuring a seamless data flow.
- **Advanced API Utilization:** Leveraged Google API keys to enrich data with web URLs, image URLs, and image source URLs, enhancing the depth of guest profiles.
- **Web Scraping Expertise:** Employed Scrapy Crochet for efficient web scraping, extracting relevant data from web URLs to augment guest information with real-time insights.
- **Generative AI and LLM Implementation:** Integrated a cutting-edge Generative AI model using GPT-3.5 Turbo to generate detailed summaries for each guest, showcasing expertise in prompt engineering and LLM evaluation.
- **Comprehensive Information Delivery:** Provided multi-faceted insights for each guest, including top 3 web URLs, image URLs, image source URLs, and AI-generated summaries, facilitating easy review and identification.
- **Exploration of Advanced Tools:** Explored and integrated additional tools like Gemini 1.5 Pro, Langchain Selenium, GPT-4 Turbo, Azure AI Index, and Google Vision API's for web detection to enhance project robustness.
- **Cloud Platform Proficiency:** Utilized Azure Databricks to deploy and run the entire project, demonstrating strong proficiency with Azure cloud services and the Azure OpenAI Service for scalable AI solutions.
- **Technological Stack:** Applied advanced Python development skills and a suite of powerful technologies, including Google APIs, Vision APIs, OpenAI GPT-3.5 Turbo, Scrapy(Web Scrapping), Gemini 1.5 Pro, VertexAI.

Precision Cardiovascular Health Prediction Using AI/ML at V-CHAMPS Precision FDA Hackathon - Represented Cognizant

- Worked in a team in the VCHAMPS Precision FDA hackathon, developing AI/ML models on Microsoft Azure to predict cardiovascular health outcomes, achieving 89% accuracy, and earning recognition as Top Performers.
- Utilized Transformers for text analysis and XGBoost for model building, focusing on predictions of all-cause mortality, cardiovascular mortality, and hospital readmission rates in veterans.
- Technologies :- ML, Azure Notebooks, Python, Transformers.

Real-time Twitter Data Analysis for Topic Modeling and Author Identification

- Led the development of a real-time Twitter data analysis system using NLP for Sanofi Stargate Media, providing insights into public sentiment, trending topics, and author classification.
- Use Case 1: Implemented BERT for advanced topic modeling, integrating GenAI to generate compelling names for identified topics and themes, enabling real-time data processing and understanding.
- Use Case 2: Developed a robust author classification system for tweets, distinguishing between roles such as Patients, Caretakers, Caregivers, Media, and Pharmacists using semi-supervised learning and Support Vector Machines (SVM).
- Use Case 3: Analyzed tweet streams to detect emerging trends, categorizing them as High Signal (significant and rapid increase in volume or sentiment) and Low Signal (subtle but consistent growth), providing valuable insights for proactive engagement and strategic planning.
- Technologies :- NLP, AWS Bedrock, Python, Semi-Supervised Learning(SVM), Transformers.

Skills

Python, Machine Learning, Deep Learning, GenAI, Gemini,AWS,Azure(GenAI), NLP, Statistics & Mathematics, Pandas, seaborn, Web Scraping(Selenium & Scrapy), R-Studio(beginner), SQL(Beginner), Microsoft Power point

Internships

DPhi (now AI Planet) | Data Science Intern || March - April 2022

- Used Neural networks in AI project for the prediction Male and Female based on the eye images, developed an CNN model for that with 86% accuracy. (<https://bit.ly/3E6EzpV>).

PRAYAS – GYWS (IIT Kharagpur) | Data Analyst || Aug -Sept 2021

- Gathered data for Political Consultancy of Kharagpur & Medinapur regions of West Bengal.
- Python coding for the graphical views and made weekly word documents reports with the team.

IIT Guwahati | Summer Internship || May - July 2021

- Campaign annual revenue price prediction, Linear Regression, Used Lasso Regression, completed 7 quizzes and study material provided by them. (<https://bit.ly/3fZ2DmK>)

Hackathons & Certifications

- **NLP Project** – Star Ratings prediction based on customer reviews (Data Cleaning, stemming, Count Vectorizer, Multinomial NB for model fitting, 76% accuracy) – (<https://bit.ly/3AaWhre>).
- **Data Science Project** – Dphi (ML project |Survival of the patient within one year, Label encoding, XGBoost, 99% accuracy, 1st Rank) – (<https://bit.ly/3WZGvcI>).
- **Kaggle Competition**- D2C (ML Project – An online order will get cancelled or not, CatBoost Classifier, 31st Rank) – (<https://bit.ly/3EsqAwh>).
- **Microsoft Certified Azure AI – 900 – 2023(97%)**

Education

- **Amity University, Noida | Noida, Uttar Pradesh**
- Master's in Statistics | 07/2022
- 9.2 CGPA
- **Sangam University, Bhilwara**
- Bachelor's in Mathematics | 07/2019
- 9.3 CGPA