## NIKHIL ADVANI

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### **SUMMARY**

Results-driven Data Scientist with 1 year of experience in machine learning and data analytics. Proficient in Python, R, SQL, Power BI, and Tableau. Currently pursuing a master's in Data Science from the University at Buffalo, with expected graduation in December 2024. Actively seeking full-time opportunities to leverage my skills and contribute to impactful projects.

#### **EDUCATION**

# Master of Professional Studies: Data Science and Applications

Aug 2023 - Expected Dec 2024

University at Buffalo, The State University of New York | Buffalo, NY, USA

**CGPA: 3.9** 

Relevant Courses: Statistical Data Mining, Machine Learning, Database Management Systems, Probability & Statistics

### **SKILLS & TOOLS**

- Programming Languages: Python, R, SQL, SAS, DAX
- Tools: Microsoft (Power BI, Office, Excel, Word, PowerPoint), Tableau, AWS (S3, Redshift, Glue, DMS), MongoDB, Oracle, Groq, Streamlit, Vector Database (Chroma, FAISS, Qdrant, Milvus, Weaviate)
- Data Science & Analytics: Python (Pandas, NumPy, Matplotlib, SciPy, Scikit-learn), ETL, Data Science Pipeline (cleansing, wrangling, visualization, modeling, interpretation), Statistics, LLM (OpenAI GPT, Llama, Mistral, Claude, Bard, Gemini)
- Machine Learning: Regression, Classification, Clustering

#### **EXPERIENCE**

#### Data Scientist/Analyst - EPL Limited

May 2022 - Apr 2023

- Developed a **logistic regression model** to offer relevant product features to at-risk clients, leading to a boost in monthly customer retention by **0.92%**
- Implemented time series forecasting models using **ARIMA & SARIMAX** for sales forecasting, enabling targeted marketing and boosting sales efforts by **22%**
- Designed **Power BI** dashboards to identify areas of improvement for sales and marketing teams, presented analysis to stakeholders, leading to an YoY **revenue gain of \$500k**
- Monitored data pipelines with AWS Redshift, S3, Glue, DMS for real-time integration, reducing data access delays by 32%
- Mentored a team of 3 interns, guiding them through building **sophisticated reports** and end-to-end projects

# Software Development Intern - Numeric Infosystem Pvt. Ltd.

Aug 2021 - Nov 2021

- Created an Inventory Management website integrating **Django**, **python**, **SQL**, **javascript**, utilized by 5 clients, streamlining operations and enhancing efficiency by 20%
- Leveraged Python, SQL and Excel to clean and prepare client data, enabling data scientists to build predictive models that lifted ROI by 7.3% annualy

## RESEARCH EXPERIENCE

## Research Assistant - UB School of Pharmacy | NY, USA

Sep 2024 – Present

• Developing a Retrieval Augmented Generation (RAG) System using LLM's to streamline drug development research, focusing on compliance regulations and disease recognition by integrating data from clinical trials and immunogenicity studies

### Research Assistant - X-Lab@UB | NY, USA

Jun 2024 – Jul 2024

• Initiated a role-based access control system within a **RAG** application using Streamlit, securing access for 100+ pathologists and 500 clients, while integrating 1000+ research papers and documents. Leveraged **Langchain tools and agents** to streamline access, **reducing retrieval time by 40%**.

## ACADEMIC PROJECTS

News Research Chatbot: Python, LLM, OpenAI, Generative AI (Link)

May 2024

- Built an LLM powered research chatbot using Langchain, OpenAI, FAISS and Streamlit reducing research time by 60%
- Established a data processing pipeline that loads and splits articles, achieving efficient chunking of data
- Integrated OpenAI embeddings and FAISS indexing, enabling storage and retrieval of relevant content, leading to a 30% reduction in API call costs

### Real Estate Price Prediction: Python, ML (Link)

Feb 2024

- Engineered models for predicting house prices through Exploratory Data Analysis and Feature Engineering.
- Applied preprocessing techniques, including outlier removal and one hot encoding, reducing data size by 27%
- Predicted property prices using Linear Regression, Decision Tree, Lasso, and Random Forest
- Utilized Grid Search CV to determine optimal model and achieved 81.9% accuracy

#### Car Sales Dashboard: Tableau (Link)

Jan 2024

- Constructed and implemented KPIs for a concise overview of car sales performance
- Translated business requirements into actionable insights for a customized dashboard with interactive features