Name

Canadian Permanent Resident

Address | Email | Phone | Github

EDUCATION

University of California   Sep 2021 – Jun 2023

Master of Science in Electrical and Computer Engineering (Machine Learning and Data Science)
- *Relevant Coursework: Probability and Statistics, Natural Language Processing, Visual Learning*

Tier-1 University, India   Aug 2013 – Jul 2018

Bachelor of Engineering (Honors) in Electrical and Electronics Engineering

SKILLS

Programming Languages: Python, C++, MySQL
Libraries and Frameworks: NumPy, Pandas, PySpark, Streamlit, Scikit-learn, Scipy, PyTorch, TensorFlow, Langchain, Open-AI
Tools: Tableau, Linux, Docker, Git, Visual Studio Code, Jupyter, Google-Colab, Jira, AWS

PROFESSIONAL EXPERIENCE

                                                                                                                              Sunnyvale, CA
Data Science Intern   Jun 2022 – Sep 2022
- Developed and fine-tuned a deep learning model for proactive client support escalation prediction
- Utilized SQL queries for data collection, performed data preprocessing and feature engineering with Pandas, and trained an LSTM model in PyTorch on imbalanced data
- Implemented a data pipeline with a scheduled cron job for automated real-time predictions and result storage
- Achieved a 30% to 60% precision enhancement in the model, resulting in improved customer satisfaction and increased client retention for the customer success team

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Software Engineer (Data Science)   Jul 2018 – Feb 2020
- Created analytics models for customer behavior and sales forecasting for an e-commerce company, emphasizing customer grouping, churn forecasting, resulting in a 15% decline in customer attrition, and sales projections using techniques such as k-means clustering, logistic regression, and random forest
- Implemented sentiment analysis using Python libraries such as NLTK and Spacy to analyze customer feedback, driving a 10% improvement in product quality ratings on e-commerce website
- Built web applications using Python Flask framework and deployed them, integrating machine learning models on AWS
- Collaborated with inter-disciplinary teams including business analysts for requirements gathering, software engineers for ML solutions creation, and MLOps engineers for model deployment

TECHNICAL PROJECTS

Multiple PDF Chatbot using Langchain - link
- Developed a streamlit based chatbot web application enabling personalized interactions with multiple PDFs through the Langchain library
- Segmented PDFs into manageable chunks, creating vector embeddings and stored them in a dedicated database
- Conducted semantic search by comparing user's question embedding with stored embeddings to grasp the PDFs context
- Generated context-aware responses using OpenAI's advanced GPT-4 large language model (LLM)

Aspect based Sentiment Analysis using Large Language Model (BERT) - link
- Implemented aspect based sentiment analysis in Pytorch using Hugging Face's transformer BERT model
- Extracted aspects from a sentence and assigned sentiments to each aspect i.e. neutral, positive, negative
- Achieved 98% accuracy for aspect term extraction task and 79% accuracy for sentiment analysis task

New York Real Estate Price Prediction - link
- Developed machine learning models to predict NYC property prices and deployed it to cloud for a course project
- Trained Random Forest and Gradient Boosted Trees models using Sklearn library and achieved RMSE of 0.52
- Containerized the application using Docker and deployed the container on AWS EC-2 instance