Narayan Raval (Open to Relocate)

Dallas, TX 76180 | 949-331-2715 | [Email](#) | [GitHub](#) | [LinkedIn](#) **|** [Portfolio](#)

Key Skills and Expertise

Core Competencies: Verbal Presentation | Strong Written Communication | Time Management | Troubleshooting

Expertise Areas: Python | MySQL | GitHub | Docker | Linux | Generative AI | Neural Networks | Text Mining | NLP | BERT

EDUCATION

Master of Science - Data Science   **GPA: 4.0/4.0**

University of North Texas, Denton, TX   Expected: Dec 2024

PROFESSIONAL EXPERIENCE

YouROK Corp (Data Scientist)   **May 2024 – Aug 2024**

- **Emotion Analysis with BERT**: Finetuned a BERT model to analyze Spanish text for emotional sentiment and happiness scoring. Built a web interface using Flask and ensured seamless deployment with Docker.
- **GPT-3.5 Mental Health Advisor**: Developed a GPT-3.5-powered mental health advisor with a Flask-based interface, supporting both English and Spanish. Designed for accessibility across different user types.
- **JavaScript Web Development**: Created a user-friendly webpage using JavaScript, making it easily understandable for non-technical users.

Research Assistant (Data Scientist)   **Aug 2023 – Aug 2024**

- **Dataset Analysis:** Conducted thorough analysis using descriptive statistics, which informed the selection of appropriate Text Mining techniques and contributed to the development of analytical models.
- **Python Selenium Scraper:** Created a Python Selenium script in non-GUI mode to efficiently download 16,000 Google patent images, significantly enhancing data retrieval speed for model training.
- **Data Preprocessing & LDA:** Managed data preprocessing and manipulation for Coursera and MTC datasets, developed a comprehensive Data Dictionary, and utilized LDA to identify key themes. These insights provided actionable recommendations for boosting student engagement and refining future course strategies.

Accenture (Data Analyst)   **Jan 2020- Jan 2023**

- **Dashboard Implementation:** Developed Tableau and Power BI dashboards, enhancing data visualization and decision-making efficiency by 15%, reflecting a strong commitment to service excellence.
- **Cloud Migration:** Successfully migrated databases to cloud platforms like Snowflake and GCP Big Query, cutting data retrieval times and costs by 20%, and demonstrating practical expertise in system optimization.
- **Jenkins Pipeline Development:** Created a Jenkins pipeline that automated key tasks on a Linux server, increasing manpower efficiency by 30% and saving $20,000 annually, with recognition in the client newsletter.
- **Oracle Database & Scripting:** Showcased proficiency in Oracle database management using MySQL and effectively led server-side scripting (Java or Perl) for updates and modifications.

PROJECT EXPERIENCE

Flowchart Recognition Model Using (FRN-CNN)

- Developed a pipeline utilizing Faster CNN with FRN layers for recognizing both handwritten and computer-generated flowcharts, significantly enhancing accuracy and processing speed.

EmoVIbe: Personalized Emotion-Driven Music Recommendations

- An innovative system combining CNN with LSTM for emotion extraction and K-means clustering for music categorization, designed to recommend music based on user emotions.

Automated Image Retrieval from Google Patents using Selenium

- Downloading over 16,000 Google images from Google Patents, organizing them into folders named after each patent. I utilized Selenium in Python for automation, I implemented non-GUI multi-threading to speed up the process.

Spanish Sentiment Analysis with BERT

- A fine-tuned BERT model, trained on a Spanish Mental Health Dataset, to perform sentiment analysis on Spanish conversations. The model extracts key expressions and provides a sentiment score ranging from 0-100 based on input.

Power BI Data Visualization

- In this project, I preprocessed the Covid-19 data, including datatype changes, and used the group by function to create targeted visualizations like county-specific and yearly graphs. I incorporated legends and other techniques to enhance the detail of these graphs.

CERTIFICATION

AWS Essential Training for Developers, Oracle Cloud Infrastructure, Kaggle Machine Learning, Generative AI LLMs

Achievements

Received a scholarship for working excellently as an intern, Participated in FPGA AI competition and became a **regional finalist**.