Nikhilesh Amarnath

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Summary

Data-driven and innovative professional with a strong background in Data Science and Analytics. Adept at identifying innovative solutions in collaboration with diverse teams using excellent communication skills. Proficient with tools such as SQL, Python, R, and Excel along with a solid understanding of statistics and data modeling techniques.

Education

The University of Texas at Dallas, Texas Aug 2021 - May 2023
Masters of Science in Computer Science *GPA: 3.71/4.0*

SRM Institute of Science and Technology Aug 2016 - May 2020
Bachelor of Technology, Computer Science and Engineering *GPA: 7.81/10*

Experience

Intel Corporation Hillsboro, Oregon
Software Graduate Intern (Openvino, Python) Aug 2022 - Dec 2022

- Leveraged the Intel OpenVino toolkit to execute deep learning model inference, and conducted rigorous validation of quantization and integer calibration experiments.
- Conducted comprehensive bench-marking for CPU, GPU, and VPU computations.
- Validated AI/ML models using ONNXRT and WinML frameworks for cross-platform compatibility.
- Validated over 100 deep learning modules by using custom creating custom Python Scripts.

Open-Source Integrators (OSI) Redlands, California
Software Engineer Intern (React, Python, Flask, Postgres) June 2022 - Dec 2022

- Performed Data Cleaning to model the Project Burn Rate, and identified correlations between different variables.
- Leveraged Predictive and Prescriptive Analysis techniques to forecast potential outcomes and recommend optimal strategies.
- Responsible for creating a responsive user interface using React to enable user input for ML models, used by project managers.
- Created dashboard in React to visualize the Predicted Burn Rate for a Project.
- Contributed in deploying ERP systems by creating multiple instances of Odoo application for 50+ charities using Kubernetes.

Academic Projects

Real-time Stock Market Prediction | (Python, Kafka, LSTM, Matplotlib) Mar 2023 - May 2023

- Developed a Long Short-Term Memory (LSTM) model for stock market analysis using Yahoo time series data.
- Utilized Yahoo API to stream live stock data to Kafka topic for real-time prediction and training.
- Utilized Matplotlib to visualize the actual and predicted stock values obtained from the LSTM model for stock market analysis.

Exploratory Data Analysis on Data Science Salaries in US | (Python) Jan 2023 - Feb 2023

- Performed data wrangling and transformation techniques to refine raw datasets for analysis.
- Used Seaborn and Matplotlib to create various visualizations and analyze data.
- Uncovered insights on Data Science job trends, salary ranges and other relevant factors in the United States.

Real-time NER of Reddit Comments | (Pyspark, ELK, Kafka, Python) Oct 2022 - Dec 2022

- Developed a Python application with Reddit Python SDK to stream subreddit comments and push to Kafka.
- Used PySpark's streaming feature to filter named entities from topic comments using spacy and push to LogStash.
- Created dashboard for visualization of the named entities in Kibana to analyze the trends in that subreddit.

Movie Search Engine | (Pyspark, MapReduce, NLTK) Aug 2022 - Oct 2022

- Built a movie search engine using plot summaries
- Utilized NLTK for stop-word removal and named entity extraction
- Implemented Tf-Idf and Cosine Similarity algorithms using MapReduce to find Document Correlation

DoorDash - Database Design (MySQL, MySQL Workbench) Jun 2021 - Dec 2021

- Developed a DoorDash application database in MySQL Workbench via reverse engineering and data requirement analysis.
- Created ER/EER model, mapped to relation schema, and normalized relations for data consistency and integrity.
- Created tables, functions, triggers and stored procedures to support the application's functionalities

Technical Skills

Languages: Python, SQL, R, Java, Javascript
Data Visualization Tools: Kibana (ELK), Tableau, matplotlib, ggplot2, plotly, seaborn
Databases: Postgres, MySQL, MongoDB
Framework: TensorFlow, Keras, OpenCV, Apache Kafka, ExpressJS, NodeJS, PySpark, Hadoop, Flask
Web Technologies: React, RESTful, Bootstrap, HTML, CSS
Developer Tools: Git, Linux, Databricks