Harsh Isamalia

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PROFILE OF SKILLS

- Proficient in Python, Java, C, Apache Kafka, Pandas, Numpy, Scikit-Learn, HTML, CSS, Flask, Django, MySQL, MongoDB, AWS, and Power BI.
- Designed and implemented a fully automated data migration pipeline from SQL to Snowflake and Amazon Redshift, utilizing Python, Apache Kafka, and Amazon S3 to maintain relational data integrity, optimize large-scale data transfers, and ensure seamless, end-to-end processing.
- Implemented machine learning algorithms for a text detection system, achieving 86% accuracy through rigorous data pre-processing and model tuning.
- Developed and deployed an object detection application using YOLOv8 and integrated it with Flask for a responsive web interface.
- Designed and created an interactive cryptocurrency dashboard using Power BI, integrating data from MySQL and implementing advanced visualization features for enhanced data analysis and user interaction.
- Demonstrated strong analytical, problem-solving, teamwork, and communication skills through successful project executions and continuous learning initiatives.

TECHNICAL SKILLS

- **Programming Languages and Libraries:** Python, Java, C, JavaScript, Pandas, Numpy, Sicikit-Learn.
- **Database Systems and Management:** MySQL, MongoDB.
- **Data Warehouse:** Amazon Redshift, Snowflake
- **Markup Languages:** HTML, CSS.
- **Frameworks:** Flask, Django.
- **Operating Systems:** Linux/Unix, Windows.
- **Cloud Computing:** AWS.
- **Tools:** Apache Kafka, Power Bi, Microsoft Office, Visual Studio, Jupyter Notebook, Git.

EDUCATION

Master of Applied Computing Jan 2024 - Apr 2025
University of Windsor Windsor, ON
Final semester of program requires a 4- or 8- month internship that would start in September 2024.
Coursework: Advanced Database Topics, Advanced System Programming, Advanced Software Engineering

Bachelor of Engineering in Information Technology Jul 2019 - Jul 2023
Gujarat Technological University Gujarat, IN
Coursework: Relational Database, Operating Systems, Networking, Project Management, Big Data

PROJECTS

DataMigrator | Python, Kafka, AWS, SQL, Snowflake | Code May 2024 - Aug 2024

- Engineered an automated pipeline for seamless data migration from SQL databases to Snowflake and Amazon Redshift, ensuring preservation of relational data structures
- Leveraged Python for secure SQL database connectivity and orchestrated data streaming to Amazon S3 deploying on Apache Kafka.
- Architected a robust data ingestion system to efficiently transfer data from Amazon S3 into Snowflake and Amazon Redshift, tailored for handling large datasets.
- Achieved end-to-end automation of data migration process, optimizing performance and ensuring data integrity throughout transfer.

Human vs LLM Text Detection System | Python, Flask, Sicikit-Learn, Jupyter Notebook | Code Jan 2024 - Apr 2024

- Implemented machine learning algorithms including Stochastic Gradient Descent (SGD) classifier and Multi-Layer Perceptron (MLP).
- Achieved an accuracy of approximately 86% in classifying content correctly.
- Conducted extensive data pre-processing, feature engineering, and model tuning to optimize performance.
- Analyzed model performance by performing cross-validation techniques and performance metrics.
- Collaborated with team members to enhance model robustness and validate results.
- Devised a UI where input can be provided, and output of text detection model is received.

Real-time Object Detection using YOLOv8 | Python, Flask, HTML, CSS, JavaScript | Code Jan 2024 - Apr 2024

- Developed an object detection application leveraging YOLOv8 for high-accuracy image recognition.
- Integrated YOLOv8 with Flask to build a responsive and interactive web-based user interface and implemented real-time image processing to detect and classify objects.
- Trained various models of different sizes on custom dataset.

CryptoInfo | PowerBi, SQL Sep 2023 - Nov 2023

- Designed and created an interactive cryptocurrency dashboard utilizing Power BI for data visualization and analysis by connecting it with MySQL.
- Created dynamic and interactive visualizations, including charts, graphs, and tables, to present key metrics such as price trends, market capitalization, and trading volumes.
- Implemented advanced Power BI features such as drill-through, slicers, and custom visuals to enhance user interaction and data exploration.

ADDITIONAL TECHNICAL TRAINING

- Google Data Analytics Specialization by Coursera
- AWS Fundamentals by Amazon Web Services by Coursera