

Kunj Patel . Jarvis Consulting

As a results-driven Data Engineer and Developer, I bring a strong academic background and a proven track record in the field. With a Master's degree in Applied Computer Science from Dalhousie University, I have developed a deep understanding of data engineering principles and techniques. Specializing in designing and implementing ETL pipelines and optimizing database schema and SQL queries, I have consistently delivered improved query performance and enhanced data accuracy. Proficient in Airflow, DBT, and Snowflake, I have successfully processed millions of records in real-time, ensuring data integrity and quality. My expertise extends to programming languages such as Python, Java, and SQL, as well as cloud technologies like AWS and Google Cloud. Committed to agile development methodologies and armed with strong problem-solving skills, I am dedicated to delivering high-quality solutions that align with business needs.

Skills

Proficient: Java, Python, SQL, Linux/Bash, Agile/Scrum, Git, Docker

Competent: PySpark, JavaScript, React, Node, Snowflake, Amazon Web Services, CI/CD

Familiar: Spark, Kubernetes, Hadoop, Databricks, Google Cloud Platform

Jarvis Projects

Project source code: https://github.com/Jarvis-Consulting-Group/jarvis_data_eng-KunjPatel03

Cluster Monitor [GitHub]: A user-friendly solution to efficiently manage a 10-server cluster. The solution allows server users to easily monitor hardware and usage information, ensuring smooth operation and maintenance. Implemented with bash scripts, it seamlessly integrates into existing workflows. PostgreSQL (psql) is chosen as the database technology for reliable data storage. The project is implemented within a Docker container for consistent execution and compatibility. Using Git version control, development progress is tracked. This monitoring solution empowers users to optimize resource allocation, enhancing stability and efficiency of the server cluster for seamless operations.

Core Java Apps [GitHub]:

- Twitter App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- JDBC App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- Grep App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.

Springboot App [GitHub]: Not Started

Python Data Analytics [GitHub]: Not Started

Hadoop [GitHub]: Not Started

Spark [GitHub]: Not Started

Cloud/DevOps [GitHub]: Not Started

Highlighted Projects

Relational Database Management System [GitHub]: A robust Relational Database Management System (RDBMS) to support SQL queries for performing CRUD operations and transactions on the data. The system incorporated a sophisticated parsing and validation mechanism utilizing complex regex expressions. A custom file format was implemented to efficiently store both the data and metadata associated with the RDBMS. Multiuser concurrent execution capabilities were integrated to enable simultaneous interactions with the RDBMS while maintaining data consistency. In addition, reverse engineering techniques were utilized to generate an Entity-Relationship Diagram (ERD) for a visual representation of the database structure. This comprehensive RDBMS solution empowers users to effectively manage their data and leverage the power of SQL queries.

Chess game [GitHub]: A console-based chess game application was developed in Java, offering an engaging experience for users to play against the computer. The application adhered to SOLID principles and employed the factory design pattern to ensure maintainability and extensibility. A Test-Driven Development (TDD) approach was applied, with extensive JUnit test cases written to validate the code and modularize its components. The development process followed an Agile

methodology, allowing for iterative and collaborative development. To streamline the development workflow, a CI/CD pipeline was implemented to automate monitoring and deployment processes. This comprehensive approach resulted in a well-structured and thoroughly tested chess game application, delivering a seamless and enjoyable user experience.

Professional Experiences

Data Engineer, Jarvis (2023-present): Donec mattis sed justo et sagittis. Vestibulum lacinia nulla ipsum. Curabitur imperdiet nibh vitae leo lacinia laoreet. Nullam accumsan, lectus ut maximus ultricies, augue justo egestas mi, vel bibendum felis.

Data Engineer, Wonolo (2022-2023): Designed and implemented a customer lifecycle tracking data asset, improving end-user accessibility and enabling faster insights. Optimized DBT incremental models for improved query performance and data accuracy. Implemented automated tests throughout the pipeline, significantly enhancing data quality and reducing error rates. Optimized SQL queries to improve query performance and ETL processing time. Collaborated with cross-functional teams to gather requirements and design data solutions that meet business needs. Coauthored an enterprise-level Data Warehouse Architecture Narrative. Designed and created data models using ERD diagrams to ensure efficient data storage and retrieval. Communicated effectively with team members and stakeholders to ensure alignment and transparency in project goals and timelines. Demonstrated strong problem-solving skills to troubleshoot and resolve technical issues.

Jr. Product Support Analyst, Exxat Systems (2019-2019): Generated client-specific reports through the development of SQL scripts, resulting in a 40% reduction in report generation time and enhancing overall efficiency. Analyzed software issues to identify root causes and implemented technical resolutions, resulting in a 13% performance improvement. Conducted thorough product testing, promptly communicating faults to the QA team and devising effective workarounds for customers. Implemented cost-effective technology solutions by assessing requirements and ensuring clear communication with stakeholders. Contributed to streamlined processes, optimized performance, and improved customer satisfaction through proficient report generation, problem-solving, and effective communication.

Education

Dalhousie University (2021-2022), Master of Applied Computer Science, Computer Science - GPA: 3.91/4.3

Gujarat Technological University (2015-2019), Bachelor of Information Techonology, Information Techonology - GPA: 8.44/10.0

Miscellaneous

- Anime Enthusiast
- Travel and exploration