

Shivam Rana

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SKILLS

- **Programming languages:** C#, SQL (T-SQL), JAVA, Python.
- **Databases:** MS SQL Server, PostgreSQL, Oracle, MySQL.
- **ETL Tools:** SSIS, Talend
- **Datawarehouse:** Snowflake, Apache Druid
- **MS Office Suite:** Outlook, Word, Excel, Visio.
- **Others:** .NET, SSMS, SSAS, ETL, data modeling, data workflows, database management, data analysis, SDLC, Git, Jira.

EDUCATION

Master of Engineering in Electrical and Computer Engineering (Software Engineering) Sep 2022 – Sep 2023
University of Western Ontario, London, Ontario, Canada

Bachelor of Technology (Computer Science Engineering) Aug 2016 – May 2020
Punjabi University, Patiala, Punjab, India

WORK EXPERIENCE

Senior Systems Engineer Apr 2022 – Aug 2022
Infosys Limited, Mohali, India

- Facilitated agile project management by handling sprints using the Jira dashboard, ensuring seamless collaboration and efficient task tracking within the development team.
- Created and deployed SSIS packages for data migration processes, resulting in the successful transfer of 100,00,00 records with minimal errors and achieving 98% data accuracy.
- Performed SSIS Development using .NET technologies, developed ETL pipelines for integrating data from sources like Flat Files (delimited, fixed width), Excel, SQL Server, Raw File.
- Implemented automation solutions for complex applications, reducing manual intervention and improving overall application performance by 30%.

Systems Engineer Oct 2020 – Mar 2022
Infosys Limited, Mohali, India

- Collaborated with 3 cross-functional teams to analyse 10 Software Requirement Specifications, ensuring alignment between business requirements and technical solutions.
- Designed and automated 15 SQL (stored procedures, user-defined functions, triggers) scripts per week for data load processes, reducing data processing time and optimizing database performance by 25%.
- Conducted data quality checks for 10 data sources, identifying and resolving data discrepancies, resulting in a 15% improvement in data reliability.

ACADEMIC PROJECTS

Analysis of NYC 311 Requests Jan 2023 – Apr 2023
Western University

- Directed a 5-member team in transforming an open-source NYC 311 dataset into a robust relational model.
- Designed a dimensional model using star schemas, ensuring optimal data organization.
- Spearheaded the adoption of SSIS for data loading, achieving a 50% increase in efficiency and eliminating data integration errors.
- Harnessed the power of SSAS to construct OLAP Cubes, delivering actionable insights for strategic decision-making and resulted in a 20% reduction in report generation time.

Analyzing the application of ensemble learning in medicine Jan 2023 – Apr 2023
Western University

- While at Western University in Canada, led the launch of a state-of-the-art project for early Parkinson's disease detection resulting in a 25% improvement in diagnostic accuracy compared to existing methods.
- Devised and deployed ensemble learning techniques alongside advanced neural network architectures, harnessing vocal biomarkers to achieve a 30% reduction in false-positive diagnoses and enabling early disease detection.

Application of Dimensional Modeling in Cyber security Sep 2022 - Dec 2022
Western University

- Created an end-to-end data management project for the growing threat of Denial of Service (DoS) attacks using PostgreSQL, Apache Druid, Apache Airflow, Apache Superset, and Lucid chart.
- Performed data modeling and mapping for the Operational Database System, derived the business rules, and executed the stored procedures to reduce manual effort by 50%.
- Applied the Druid Datawarehouse solution, data reporting for the descriptive data analysis using Apache Superset.

CERTIFICATIONS

Udemy Feb 2024 – Feb 2024

- Complete Microsoft SQL Database Administration

LinkedIn Learning Sep 2023 – Sep 2023

- Data Engineering Foundations.

Infosys Limited, Mysore, India Jan 2020 – Mar 2020

- Co-op in Full Stack Web Development using .Net and Angular.