

Rashesh Desai

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Summary

Data Analyst and Computer Science graduate with 2+ years of experience in Python, SQL, and machine learning. Achieved **30%** efficiency gains by automating workflows and contributed to **20%** sales growth through data-driven insights. Skilled at turning complex data into clear business value. Eager to drive impactful decisions in a dynamic software development and data analytics role.

Technical Skills

- **Programming Languages:** C, C++, C#, Python, R, JavaScript, React, TypeScript
- **Databases:** MySQL, PostgreSQL, MongoDB, Firebase, SQLite, SQL Server
- **Cloud & DevOps:** Docker, Kubernetes, Google Cloud (GCP), Microsoft Azure, Jira, Postman, Swagger
- **Version Control & Tools** – Git, GitHub, Bitbucket, Power BI, Tableau
- **Frameworks:** Pandas, Flask, NumPy, TensorFlow, Scikit-learn, Apache Spark

Education

Sheridan College

Oakville, ON

Honors Bachelor of Computer Science (Specialized in **Data Analytics**)

Sept 2021- Apr 2025

- **Relevant Course Work:** Machine Learning Techniques, Big Data Management, Data Visualization, Statistics for Data Science
- **Extra-Curricular:** Sheridan Computer Science *Club Mentor*, Python and C# *Programming Tutor*

Work Experience

Evertz Microsystems Limited

Burlington, ON

Software Engineer – Co-op ([Employer Evaluation](#))

May 2024 – Aug 2024

- Automated 10+ test cases using JavaScript, increasing test coverage by 30% and reducing manual testing effort by **20%**.
- Completed a Python-based regression testing automation project in just 2 weeks using the wxPython framework.
- Integrated Python test scripts into the **CI/CD** pipeline, boosting regression testing efficiency by **25%**.
- Collaborated in a **Scrum** environment, contributing to daily stand-ups and sprint planning to streamline the development workflow.

CAAI – Encore Marketing Engagement

Oakville, ON

Data Scientist Intern

Oct 2023 – Sept 2024

- Integrated supervised and unsupervised machine learning algorithms and applied association rules in Data Mining to find trends and patterns from the dataset.
- Demonstrated expertise in data preprocessing techniques, removed **5%** of records with blank IDs, ensuring data quality, and enhancing model accuracy through cleaning, normalization, and transformation methodologies.
- Empowered the marketing team with actionable insights, resulting in a **20%** increase in strategic sales.

Projects

Object Detecting System - [Project Link](#)

Dec 2024 – Present

- Developed a real-time cricket ball tracking system utilizing OpenCV and PyTorch, leveraging YOLO-based object detection to accurately identify and track ball trajectories.
- Integrated computer vision techniques with deep learning models to process high-speed footage, resulting in a 20% reduction in false detections.
- Delivered performance insights for AI-based coaching, **as measured by** successful trajectory overlays and impact visualization, **by** extracting and analyzing positional data from each frame.

AI Chat Assistant with RAG - [Project Link](#)

Feb 2025 – Apr 2025

- Built an intelligent chatbot using Gemini 1.5 Pro, **Lang chain**, Node.js, and Angular, integrating **Retrieval Augmented Generation (RAG)** for enhanced context-aware responses.
- Engineered a full-stack solution, combining a responsive Angular frontend with a Node.js backend to manage user queries and generate dynamic, contextually accurate replies.
- Optimized chatbot performance by overcoming limitations of out-of-context prompts, ensuring accurate, relevant, and conversational responses.

Retail AI Insights - [Project Link](#)

Oct 2023 – Sept 2024

- Created a data visualization platform using the **Dash** framework that consolidated **10+** sales and operational metrics, enabling quicker decision-making and improving cross-functional access to insights.
- Integrated **APIs** and **third-party geolocation** data to add spatial context to sales analytics, uncovering regional performance disparities and optimization opportunities.
- Delivered actionable insights through Python-based analysis that directly contributed to a **20%** increase in regional sales.

House Price Prediction - [Project Link](#)

Nov 2023 - Dec 2024

- Built multiple regression models to predict house prices, as measured by improved accuracy using R-squared and MSE scores, by training and evaluating algorithms such as Linear Regression, Random Forest, and Gradient Boosting.
- Performed end-to-end data analysis by cleaning, visualizing, and engineering features to prepare high-quality input for machine learning models.

Certifications

- MongoDB Aggregation: Advanced data pipeline techniques - [Certification Link](#)

Mar 2025