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Summary

- Computer Science student with 2 years of experience specializing in Data Analytics at Sheridan College.
- Gained hands-on experience in software engineering and automation testing at Evertz Microsystems using Python & JavaScript. Developed AI/ML models for datasets exceeding 5M records, driving business insights at Sheridan CAAI partnership with Encore Market Engagement.

Technical Skills

- Programming Languages: C, C++, C#, Python, Java, R, JavaScript, Angular, React, Flutter, TypeScript
- Databases: MySQL, PostgreSQL, MongoDB, Firebase, SQLite, SQL Server
- Cloud & DevOps: Docker, Kubernetes, Google Cloud (GCP), Microsoft Azure, Jira, Postman
- Version Control & Tools Git, GitHub, Bitbucket, Power BI, Tableau
- Frameworks: Pandas, Flask, Numpy, Spring Boot, ASP .Net Core MVC, Xamarin

Education

Sheridan College Oakville, ON

Honors Bachelor of Computer Science (Specializing in Data Analytics), 4th year

Sept 2021- Apr 2025

- Courses: 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 Microsystem Limited

Burlington, ON

Software Engineer – Co-op

May 2024 – Aug 2024

- Automated test scripts in JavaScript to simulate user actions, improving test coverage and efficiency by 30%.
- Developed Python scripts using WxPython framework to automate commands within Evertz's MagnumPI software for regression testing, completing the task in 2 weeks despite its complexity.
- Integrated Python-based test automation scripts into the existing CI/CD pipeline, enhancing regression testing efficiency by 25% and improving software reliability.
- Collaborated in a Scrum environment, participating in daily stand-ups and sprint planning to improve development workflow.

CAAI – Encore Marketing Engagement

Oakville, ON

Data Scientist

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 - <u>AICricketCoach_CapstoneProject - Video Processing</u>

Dec 2024 – Present

- Developed an AI-powered cricket ball tracking system using **OpenCV and PyTorch**, capable of detecting and tracking ball trajectory in real-time from video frames.
- Deployed an object detection model with **YOLO** to accurately identify the cricket ball, extract positional data, and overlay trajectory for performance analysis.
- Integrated **computer vision** and **deep learning models** to analyze ball motion from bowler release to batsman impact, providing insights for an AI cricket coaching system.

AI Chat Assistant with RAG

Mar 2025 – Present

- Built an intelligent chatbot using Gemini 1.5 Pro, Langchain, 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 handle 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.

Certifications

• MongoDB Aggregation in Python - Certification Link