

Karthik Selvaraj



Status in Canada: Permanent Resident (PR)

Summary

Experienced analytics professional with 4+ years of industry expertise, skilled in leveraging advanced analytics methodologies and tools to deliver impactful data analyses. Demonstrated success in achieving a significant cost savings of \$800k CAD per year through data-driven insights and recommendations. Proficient with Python, SQL, GCP, Power BI, Tableau, Excel etc. complemented by exceptional communication abilities, business & financial acumen, teamwork, critical thinking, and problem-solving skills.

Work Experience

Software Developer – Analytics Application, Loblaw Companies Ltd, Canada

May 2022 to December 2023

- ❖ Engineered a robust data extraction feature within a Java application and collected critical metrics, logs and traces from Shoppers Drug Mart's nationwide retail network and integrated with GCP, Looker, and Grafana for monitoring and analysis with real-time alerts, which resulted in a 32% reduction in incident response times, a 21% decrease in MTTR and a quarterly cost savings of \$100k CAD.
- ❖ Extracted control stores and target stores data from Teradata and Google Cloud Platform (GCP) and leveraged Power BI, SQL, Looker, Grafana & Excel and prescribed key insights and recommendations and driven a 20% increase in operational efficiency, yielding \$75k CAD in quarterly savings.
- ❖ Communicated key insights and metrics, and weekly status reports to various stakeholders involved and analyzed business processes, documented technical, business requirements etc. through detailed flowcharts, data flow diagrams and streamlined workflows for several development teams and assisted them in meeting analytical objectives.
- ❖ Leveraged data-driven approaches, artificial intelligence tools, best project management practices and successfully transitioned production support initiative for mission critical nationwide pharmacy applications during vendor transition and achieved seamless improved customer experience and minimized disruptions to end-users saving \$100k CAD annually.

Stores Data Analyst, Loblaw Companies Ltd, Brampton, Canada

April 2021 to April 2022

- ❖ Worked with retail front-end and back-office systems and coordinated with various cross-functional teams and improved checkout efficiency by 10% and reduced transaction errors by 5%.
- ❖ Utilized SQL, Power BI, Excel, and statistical tools to surface insights, create metrics, dashboards, and reports for stakeholders.
- ❖ Queried datasets with SQL and facilitated recurring analyses, reducing data retrieval time by 20% and improving data accessibility.
- ❖ Translated business needs into technical requirements, collaborating with project managers, internal stakeholders, developers & vendors.

Business Development Consultant, FTMS Consultants, Cyberjaya, Malaysia

May 2017 to May 2018

- ❖ Grew leads & customers through marketing campaigns, resulting in 30% increase in client acquisition and 15% revenue growth, generating additional RM 200k per year.

📍 Brampton, Canada

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Skills

Programming:

- Python (Frameworks: Django, Flask)
- Java (Framework: Spring)
- C# (Frameworks: ASP.NET, VB.NET)
- SQL
- JavaScript
- Shell Scripting (Linux)

Databases:

- MS SQL Server
- MySQL
- MongoDB

Visualization, BI & Reporting:

- Tableau
- Power BI
- Looker Studio
- Grafana
- SSAS
- SSRS

ETL, Data Warehousing & Big Data:

- SSIS
- Alteryx
- Teradata
- BigQuery
- Spark

API's & Code Testing:

- REST
- SOAP
- GraphQL
- PyTest
- Pylint

Cloud, DevOps & CI/CD:

- Google Cloud Platform (GCP)
- Docker
- Kubernetes
- Istio
- Gitlab CI/CD, GitHub Actions

VCS, IDE & Other Tools:

- Git / GitHub/ GitLab
- VS Code
- Eclipse
- Tableau Prep
- Google Analytics
- SPSS
- Dynatrace
- Jira
- Confluence

- ❖ **Identified target audiences and markets using Google Analytics, SPSS, Excel, and Tableau**, improving campaign targeting by 25% and conversion rates by 15%, generating RM 250k additional revenue.
- ❖ **Evaluated marketing campaign performance, analyzed sales, and provided insights**, increasing marketing ROI by 15% and reducing customer churn by 10%.
- ❖ **Conducted market research to identify market development opportunities, risks, and any market trends** and prepared reports, research papers and articles.

Project Intern - Java, HCL CDC, Coimbatore, India

December 2015 to March 2016

- ❖ Successfully Implemented secure ID-based two-server **Password Authenticated Key Exchange (PAKE) encryption mechanism using Java**, ensuring robust data protection and privacy.
- ❖ **Used and applied various tools and technologies for core Java application development.**
- ❖ **Documented solutions** utilizing flowcharts, layouts, diagrams, charts, code comments.

Software Developer Trainee, Sierra ODC Pvt Ltd, Coimbatore, India

May 2015 to November 2015

- ❖ **Developed and maintained web and desktop applications**, adhering to requirements and industry best practices.
- ❖ **Used ASP.NET, VB.NET, ADO.NET, SQL Server, HTML, CSS, JavaScript** and other established development tools, guidelines, and conventions with great understanding of MVC architecture.

Education

- ❖ **Post-Bac Diploma in Business Analytics (PBD-BA)**
Cape Breton University, Sydney, Canada - 2019 to 2021
- ❖ **Master of Business Administration (MBA)**
Anglia Ruskin University (FTMS Campus, Cyberjaya, Malaysia) - 2016 to 2017
- ❖ **Bachelor of Engineering (BEng)**
Anna University (KGI SL Campus, Coimbatore, India) - 2011 to 2015

Portfolio Projects

- ❖ News Headline Classification using Multinomial Naive Bayes, Support Vector Machines & Neural Network with SoftMax Layer 🔗
- ❖ NY311 – Predictive Analytics on NY Housing Complaints 🔗
- ❖ Article Category Classification and Prediction using Natural Language Processing & Logistic Regression 🔗
- ❖ Market Basket Analysis using Associative Data Mining & Apriori Algorithm 🔗

Certifications

- ❖ Google Cloud Big Data & Machine Learning Fundamentals 🔗
- ❖ IBM Data Analyst Professional Certificate 🔗
- ❖ edX – Data Science & ML Capstone Project 🔗
- ❖ Tableau A-Z: Tableau Training for Data Science 🔗
- ❖ Agile with Atlassian JIRA 🔗

Data Analysis Core Competencies:

- Problem Identification & Definition
- Data Acquisition & Integration
- Data Cleaning & Wrangling
- Exploratory Data Analysis
- Statistical Analysis & Data Modeling
- Data Preprocessing & Feature Engineering
- Model Selection, Training, Development & Deployment
- Model Evaluation & Validation
- Data Visualization
- Business Intelligence & Communication

Machine Learning:

- Supervised Learning
- Unsupervised Learning
- Natural Language Processing
- Reinforcement Learning
- Transfer Learning
- Deep Learning
- Computer Vision

Data Science Libraries:

- NumPy, Pandas, Polars, PySpark
- Scikit-Learn, XGBoost, TensorFlow, Keras, PyTorch
- Matplotlib, Seaborn, Plotly
- NLTK, Gensim, Hugging Face Transformers, OpenCV
- ArcGIS, MapInfo, Folium

Business Acumen:

- Financial Analysis
- Market Research
- Business Development
- Strategic Planning
- Operations Management
- Project Management

Soft Skills:

- Communication
- Cross-Functional Coordination
- Teamwork
- Leadership
- Critical Thinking
- Problem Solving

Agile Methodologies:

- Scrum, Kanban