

ROLE PROFILE

Title:	Data Engineer
Function:	Data Science/Data Engineering
Reports to:	Interim to SVP, Analytics and Optimization
Location:	Toronto
Type:	Full Time, Permanent

Role Description

The Data Engineer is responsible for the deployment and maintenance of Machine Learning systems and supporting data streaming pipelines in production. The role reports to the Director, Data Science & Machine Learning.

As Data Engineer, you'll work closely with Data Scientists deploying and managing machine learning solutions and build data streaming pipelines that support these solutions. You will work with internal product and technology project teams involving large-scale data sets, building Machine Learning pipelines for Machine Learning model training, and serving up the personalized offers that power Exchange Solutions products.

This role is a unique opportunity to join a dynamic team of analytical professionals that partners up with Business and Technology to design innovative, value-adding customer engagement solutions for our clients. The role is a great fit for motivated individuals seeking to further develop their expertise in the area of Machine Learning in the area of e-commerce and customer loyalty personalized offers.

Primary Responsibilities

- Be a part of a cross-functional organization that includes business product management, technical product management, technical solution architects, data scientists, data management, data analysts, software and Machine Learning engineers, etc.
- Work closely with Product Managers, Architects, and Data Scientists to design, build, maintain and optimize our data streams and machine learning applications.
- Work with data scientists and engineers to deploy machine learning models in production.
- Build and manage kinesis streams, feature stores used in Machine Learning model training, and real-time prediction
- Implement and automate continuous integration (CI), continuous delivery (CD), and continuous training (CT) for machine learning (ML) systems.
- Apply DevOps best practices and automated deployments, model and data versioning, model validation, data validation, and monitoring Machine Learning production systems

- Closely collaborate with Data Scientists and Machine Learning Engineers on the implementation, scaling, and maintenance of data science solutions within personalized offers products
- Ensuring all relevant operational data sources ingest appropriately into standardized data warehouse (Snowflake) schemas, working collaboratively with the Data Management team
- Implement and maintain model management and A/B testing framework for evaluating test and trial of model and rule optimizations.
- Participate in ESI Innovation labs as needed to support rapid product prototyping and product development
- Contribute to the overall operations and culture of the company, fostering our values and policies.

Capability Requirements – education, skills & experience

- Post-secondary education with a graduate degree in Computer Science, Machine Learning, or related fields
- Minimum 3-5 years' experience with 1-2 years of data streaming experience
- Proficiency with SQL and Python
- Proficiency with SQL and NoSQL database technologies
- Proven experience in implementation and maintenance of Machine Learning solutions using AWS tooling such as kinesis streams, feature stores, Sagemaker, Lambdas
- Understanding of open source streaming processing systems (Apache Kafka, Storm, Spark streaming, Kinesis Analytics or Flink) will be a plus
- Exposure to automated testing and CI/CD in the Machine Learning context
- Understanding of fundamental Machine Learning concepts
- Critical thinking, attention to detail and accuracy, high aptitude for problem-solving.
- Excellent communication skills, both verbal and written.
- Driven self-starter looking to learn, teach and contribute significantly to the energy of a high-performing team.