

Applied Data Scientist, Machine Learning & IoT Systems

Location: Burnaby, BC

Type: Full-time permanent

Role Summary

Orca is looking for a hands-on Applied Data Scientist to develop the intelligence behind our connected water monitoring platform.

This role focuses on applying data science and machine learning to time-series and IoT data for detection, classification, analytics, and decision support.

We are looking for someone comfortable working from raw sensor data through model development, validation, production deployment, and ongoing improvement in a live system.

Key Responsibilities

- Analyze time-series and sensor data to identify patterns, anomalies, and useful signals.
- Develop and improve classification, anomaly-detection, predictive, and other ML algorithms.
- Build features and detection logic for noisy, real-world IoT data.
- Develop algorithms that operate reliably on continuously arriving or near-real-time data.
- Validate, tune, deploy, and monitor models in production.
- Work closely with software, hardware, and product teams to turn models into reliable product capabilities.
- Document datasets, experiments, assumptions, and model performance.

Qualifications

- Degree in data science, statistics, applied mathematics, computer science, engineering, or a related field, or equivalent experience.
- Demonstrated experience developing ML or statistical algorithms used in production.
- Experience with time-series, streaming, telemetry, or other continuously generated data.
- Strong Python skills and experience with common data science and ML frameworks.
- Strong understanding of anomaly detection, classification, feature engineering, and model validation.
- Experience working with noisy, incomplete, real-world datasets.
- Ability to write maintainable production-quality code.
- Working knowledge of SQL, APIs, version control, testing, and cloud data workflows.

Advantageous Attributes

- Experience with IoT platforms, edge devices, sensor data, or physical systems.
- Experience with real-time or near-real-time detection systems.
- Experience with Google Cloud Platform or similar cloud services.
- Familiarity with time-series databases, event pipelines, model monitoring, or MLOps.
- Experience applying ML to industrial, building, utility, or other operational data.
- Startup experience and a bias toward practical, measurable results.