Machine Learning Engineer (Contract)

Onshore – Toronto, Canada | Hybrid | Start: Early February

At Budhhi, ML Engineering is about more than deploying models.

It's about building intelligent systems that scale, adapt, and deliver real impact.

We are looking for a Senior Machine Learning Engineer to design, build, and operate production-grade ML and GenAI systems across Budhhi's internal platforms and client-facing solutions. This role is for engineers who are comfortable owning the full ML lifecycle — from training pipelines to inference, monitoring, and platform-level thinking.

What You'll Do

Build End-to-End ML Systems

- Design and implement training pipelines, feature pipelines, and orchestration workflows

- Build real-time and batch inference systems for ML and GenAI workloads

- Integrate LLMs, RAG pipelines, and agentic AI patterns into production systems

Engineer for Scale & Reliability

- Implement CI/CD for ML including versioning, rollbacks, and safe deployments

- Monitor models for performance, drift, and regressions

- Design systems with security, compliance, and cost awareness

Platform & Product Ownership

- Contribute to shared ML and GenAI platforms, tooling, and infrastructure

- Partner with Product Managers to embed ML into user-facing features

- Work closely with Data Scientists and AI Architects to operationalize models

Lead by Doing

- Write clean, testable, production-quality code

- Review and elevate code quality across teams

- Help define and enforce engineering and MLOps best practices

What We're Looking For

Experience & Seniority

- 8–12+ years in ML engineering, software engineering, or applied AI

- Proven experience deploying ML systems into production

- Comfortable owning systems end-to-end in high-ambiguity environments

Core ML & AI Expertise (Non-Negotiable)

- Hands-on experience with:

- Training pipelines and orchestration

- Model serving and inference (batch & real-time)

- LLMs, GenAI, RAG, and agentic AI patterns

- Classical ML and deep learning

- Strong understanding of model evaluation and monitoring

- Strong experience in building applications with best practices of Predictable AI, Generative AI, Explainable AI and Ethical AI

Platform & Infrastructure Strength

- Experience with MLOps (CI/CD for ML, versioning, monitoring)

- Cloud-native ML experience (Azure, AWS, GCP)

- Familiarity with data infrastructure (event streams, feature stores, vector DBs)

- Exposure to IaC (Terraform, Bicep, or equivalent)

Engineering Excellence

- Strong Python skills

- Solid backend engineering fundamentals (APIs, services)

- Commitment to testing, observability, and maintainability

Contract Details

- Engagement Type: Contract (extendable based on performance)

- Location: Toronto, ON (Hybrid)

- Start Date: Early February

- Compensation: Market-competitive, premium for the right talent

- Future: Long-term partnership and extensions encouraged

Why Budhhi?

- Build real ML and GenAI systems at scale

- Work across internal IP and enterprise client platforms

- Collaborate with senior AI Architects and Product leaders

- High-ownership culture with minimal bureaucracy

- Focus on clarity, engineering rigor, and impact

Ready to Engineer Intelligence?

If you enjoy building production-grade ML systems, thinking in platforms, and shipping meaningful AI — we want to talk.

Apply now and help power the next generation of intelligent systems at Budhhi.