

# Software Engineer—PHP & Search Relevance (AI/ML)

**Location:** Ontario, Canada (Hybrid or Remote within Canada)

**Company:** Mercatus Technologies Inc.

**Industry:** SaaS / Technology

**Type:** Full-time, Permanent

**Salary:** Competitive; Commensurate with experience and meets or exceeds the prevailing wage

## About Mercatus

Mercatus Technologies is a Canadian leader in digital commerce platforms, serving grocery retailers across North America and expanding into international markets. We deliver innovative, scalable, and AI-powered technology solutions to meet the fast-evolving demands of the global retail landscape. As part of our strategic growth, we are committed to expanding our Canadian engineering talent and product innovation through the Global Talent Stream program.

## Role Overview

We are hiring a Software Engineer – PHP & Search Relevance (AI/ML) to help evolve our platform with advanced search capabilities and intelligent automation. This role will focus on backend development using PHP and contribute to AI-driven search relevance, ranking, and personalized discovery features. You'll be an essential part of our modernization efforts, re-architecting legacy systems and building next-generation components to support our growing client base.

This position plays a critical role in building scalable backend systems, integrating AI/ML tools, and enhancing user experience through smarter, more relevant search technology.

## Key Responsibilities

- Design, develop, and maintain scalable PHP applications and robust RESTful APIs
- Refactor and optimize code to ensure high performance, security, and maintainability
- Modernize legacy systems with up-to-date frameworks and best practices
- Integrate AI/ML components to enhance search ranking, recommendations, and personalization
- Contribute to advanced search systems using semantic and vector-based approaches
- Develop and manage real-time data indexing, sharding, and retrieval using Solr or Elasticsearch
- Analyze search logs and metrics (CTR, MRR, recall, etc.) to continuously tune performance
- Collaborate cross-functionally with infrastructure, product, and data science teams
- Uphold a culture of engineering excellence, technical ownership, and continuous learning

## Core Qualifications

- 4+ years of professional experience in software engineering with PHP
- Strong proficiency in SQL-based databases (e.g., MySQL)
- Deep experience in REST API development and secure integrations with third-party APIs
- Understanding of HTTP, caching layers, proxies, and API security/authentication
- Experience in collaborative software environments with version control and agile development

- Demonstrated interest or experience in AI/ML integration or search technologies
- Strong analytical and problem-solving skills
- Excellent written communication and documentation habits

## Preferred Skills in AI/ML and Search Engineering

- Relevance Tuning: Experience with query parsing, tokenization, stemming, synonym handling, and custom ranking logic
- Machine Learning for Search: Familiarity with embedding models, transformer fine-tuning, and use of frameworks such as Hugging Face
- Indexing & Retrieval: Proficiency in Elasticsearch or Solr for scalable and efficient data access
- Search Analytics: Understanding of search A/B testing methods (interleaving), performance metrics (CTR, precision, recall), and user behavior analysis

## Nice-to-have

- Experience with modern PHP frameworks such as Symfony or Laravel
- Familiarity with asynchronous processing tools (RabbitMQ, AWS SQS)
- Integration experience with payment platforms (e.g., PayPal, Payeezy)
- Exposure to containerized environments (Docker, Kubernetes)
- Use of performance monitoring and observability tools (e.g., New Relic)

## Why Join Mercatus?

- Contribute to a fast-growing Canadian company recognized for AI-powered retail innovation
- Shape the future of digital commerce through modern search and machine learning
- Work remotely or hybrid in Ontario with flexible arrangements
- Join a collaborative and globally distributed engineering team
- Be part of a mission to scale Canadian-led technology for global impact

Please send your resume to: [maryann.dunlop@mercatus.com](mailto:maryann.dunlop@mercatus.com)

***Apply Now***