



## Principal AI Engineer (PHP/MySQL)

Full-time Remote  
<https://lumabrighterlearning.com>

### About Luma

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At Luma Brighter Learning, our mission is simple: to ignite authentic human connection through learning because connection changes and saves lives.

We provide learning experiences that serve professionals in transportation and other safety-critical industries, where communication, leadership, and human performance truly matter.

We are a mission-driven, growth-oriented company that is independently owned. We prioritize long-term impact, sustainable growth, and product excellence over short-term financial pressures.

At Luma, we have the following core values.

- **CUSTOMER COMMITMENT:** We build relationships that make a positive difference in our client's and our own lives.
- **INTEGRITY:** We deliver on our promises.
- **QUALITY:** What we do, we do well.
- **PASSION:** Committed in heart and mind.
- **TEAMWORK:** We can all do small things, but together we can do something wonderful.

### Role Overview

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We are looking for a Principal AI Engineer to lead Luma's strategic AI initiatives and make a meaningful difference in learning outcomes for our clients. This is a senior, hands-on technical role at the intersection of modern AI engineering and Luma's PHP platform.

You will architect and build agentic workflows, AI-powered tools, and data analysis systems that deliver actionable insights to transportation training clients. From interactive content creation to multi-modal data analysis and coaching tools, you will define how AI becomes a core part of the Luma platform.



This is not a research role — it is a build role. You will ship production AI systems and help set the technical direction for one of Luma's most important strategic initiatives.

## Responsibilities

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### AI Systems & Architecture

- Architect and build scalable AI features integrated into Luma's PHP platform, including RAG pipelines, multi-agent workflows, and LLM-powered tools.
- Design and implement agentic workflows that analyze learning data and deliver meaningful, personalized feedback to Luma clients.
- Build interactive content creation tools and coaching applications using LLM APIs (Claude, OpenAI) and orchestration frameworks (LangChain, LlamaIndex).
- Integrate vector databases and multi-modal data processing for analysis across text, structured data, and other learning data modalities.

### Backend Engineering

- Develop robust PHP/Laravel and Python-based services for AI orchestration and data pipelines.
- Build and maintain cloud-native, API-first services on AWS including Lambda functions and serverless architectures.
- Optimize performance across application, database (MySQL/MariaDB), and infrastructure layers to ensure reliable, low-latency AI responses.

### Technical Leadership

- Define architectural standards for AI development and champion engineering best practices across the team.
- Help define a culture of responsible and productive AI usage at Luma by presenting to, mentoring, and supporting engineers in their professional use of AI.
- Collaborate with product and leadership to influence the AI roadmap and identify high-value opportunities.
- Document systems, decisions, and patterns to build a scalable knowledge base for the engineering team.

## Qualifications

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### Required

- 8+ years of professional software engineering experience, with at least 3 years focused on AI/ML applications in production environments.
- Strong PHP proficiency with hands-on experience in Laravel or similar frameworks.
- Demonstrated experience building with LLM APIs (Claude, OpenAI) including prompt engineering, tool use, and agentic patterns.



- Practical experience with RAG systems, vector databases (Pinecone, Qdrant, or similar), and AI orchestration frameworks.
- Solid AWS experience including Lambda, EC2, and serverless or container-based deployments.
- Strong MySQL/MariaDB skills including data modeling and query optimization.
- Ability to work independently, make sound technical judgments, and take ownership end-to-end.
- Excellent written and verbal communication skills — able to explain AI concepts clearly to technical and non-technical stakeholders.

### **Nice to Have**

- Experience with Python for AI/ML tasks and API orchestration.
- Familiarity with multi-modal AI (document analysis, structured data, etc.).

## **Job Type**

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This is a full-time remote employment position in only TX, WI, OH, SC, AL, MS, MI, NC, MO, MT, AZ only. This is a full-time 40-hour a week position.

## **Benefits**

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- Competitive compensation with base salary and annual bonus potential
- Health and wellness reimbursement
- Professional development and education support
- Flexible, fully remote work environment

## **Collaboration**

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- This role will report to the Engineering Manager.
- This role is part of our IT Department.
- The Luma team is small (<25) so interaction and engagement with everyone is possible.

## **Expected Behaviors:**

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- Kindness
- Maturity
- No-Drama
- Problem Solver
- Detail Oriented



- Collaborator
- Biased Toward Action
- Trust
- Conscientiousness
- Extreme Ownership

## Physical Demands and Work Environment

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The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the functions. While performing the duties of this position, the employee is regularly required to talk or hear. The employee frequently is required to use hands or fingers, handle or feel objects, tools, or controls. The employee is occasionally required to stand; walk; sit; and reach with hands and arms. Specific vision abilities required by this position include close vision, distance vision, and the ability to adjust focus. The noise level in the work environment is usually low to moderate.

## Note

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This job description in no way states or implies that these are the only duties to be performed by the employee(s) incumbent in this position. Employees will be required to follow any other job-related instructions and to perform any other job-related duties requested by any person authorized to give instructions or assignments. All duties and responsibilities are essential functions and requirements and are subject to possible modification to reasonably accommodate individuals with disabilities. To perform this job successfully, the incumbents will possess the skills, aptitudes, and abilities to perform each duty proficiently. Some requirements may exclude individuals who pose a direct threat or significant risk to the health or safety of themselves or others. The requirements listed in this document are the minimum levels of knowledge, skills, or abilities. This document does not create an employment contract, implied or otherwise, other than an "at will" relationship.