

## Backend Job Description

You'll be building new product features alongside a frontend engineer and product manager using our Agile methodology, as well as addressing issues to ensure our apps are robust and our codebase is clean. As a Product Engineer, you'll write clean, efficient code to enhance our product's codebase in meaningful ways.

In addition to classic backend work, this role also touches on building AI-powered systems, where you'll design and orchestrate how large language models (LLMs) integrate into Rakamin's product ecosystem.

Here are some real examples of the work in our team:

- Collaborating with frontend engineers and 3rd parties to build robust backend solutions that support highly configurable platforms and cross-platform integration.
- Developing and maintaining server-side logic for central database, ensuring high performance throughput and response time.
- Designing and fine-tuning AI prompts that align with product requirements and user contexts.
- Building LLM chaining flows, where the output from one model is reliably passed to and enriched by another.
- Implementing Retrieval-Augmented Generation (RAG) by embedding and retrieving context from vector databases, then injecting it into AI prompts to improve accuracy and relevance.
- Handling long-running AI processes gracefully — including job orchestration, async background workers, and retry mechanisms.
- Designing safeguards for uncontrolled scenarios: managing failure cases from 3rd party APIs and mitigating the randomness/nondeterminism of LLM outputs.
- Leveraging AI tools and workflows to increase team productivity (e.g., AI-assisted code generation, automated QA, internal bots).
- Writing reusable, testable, and efficient code to improve the functionality of our existing systems.
- Strengthening our test coverage with RSpec to build robust and reliable web apps.
- Conducting full product lifecycles, from idea generation to design, implementation, testing, deployment, and maintenance.
- Providing input on technical feasibility, timelines, and potential product trade-offs, working with business divisions.
- Actively engaging with users and stakeholders to understand their needs and translate them into backend and AI-driven improvements.