

Job Description — Product Engineer (Backend)

Rakamin | 2025

About the Role

Rakamin is hiring a Product Engineer (Backend) to work on Rakamin.

We're looking for dedicated engineers who write code they're proud of and who are eager to keep scaling and improving complex systems — including those powered by AI.

As a Product Engineer, you'll be responsible for building new product features alongside a frontend engineer and a product manager using our Agile methodology, as well as maintaining and improving existing systems to ensure robustness and code quality.

In this role, you'll not only focus on traditional backend development but also work on AI-powered systems, designing and orchestrating how large language models (LLMs) integrate into Rakamin's product ecosystem.

Key Responsibilities

- Collaborate with frontend engineers and third parties to build robust backend solutions that support configurable platforms and cross-platform integrations.
- Develop and maintain server-side logic for the central database, ensuring high performance throughput and response time.
- Design and fine-tune AI prompts aligned with product requirements and user contexts.
- Build LLM chaining flows, ensuring reliable data flow between models.
- Implement Retrieval-Augmented Generation (RAG) by embedding and retrieving context from vector databases to improve AI accuracy and relevance.
- Handle long-running AI processes gracefully — including job orchestration, async background workers, and retry mechanisms.
- Design safeguards for uncontrolled scenarios (e.g., managing 3rd party API failures, mitigating LLM randomness).
- Leverage AI tools and workflows to increase team productivity (AI-assisted code generation, automated QA, internal bots).

- Write reusable, testable, and efficient code to enhance existing systems.
 - Strengthen test coverage using RSpec to build reliable and maintainable web applications.
 - Contribute across the full product lifecycle — from ideation to design, implementation, testing, deployment, and maintenance.
 - Provide input on technical feasibility, timelines, and trade-offs in collaboration with product and business teams.
 - Engage with users and stakeholders to understand needs and translate them into backend and AI-driven improvements.
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About You

We're looking for candidates with a strong track record in backend web development, ideally with exposure to AI/LLM development or a strong interest in learning it.

You should have experience with backend languages and frameworks such as Node.js, Django, or Rails, as well as modern backend technologies and tools, including:

- Database Management: MySQL, PostgreSQL, MongoDB
- API Development: RESTful APIs
- Security Compliance and data protection principles
- Cloud Technologies: AWS, Google Cloud, Azure
- Server-side Languages: Java, Python, Ruby, or JavaScript
- Frontend Understanding: basic familiarity with web technologies
- Authentication & Authorization: across systems, servers, and environments
- Scalable Application Design Principles
- Database Schema Design that supports business processes
- Automated Testing Platforms and Unit Testing
- Familiarity with LLM APIs, Embeddings, Vector Databases, and Prompt Design best practices

We're not big on credentials — your degree or alma mater doesn't define you. What matters most is what you can do and how you do it.

You'll report directly to the CTO, but Rakamin is a place where "Managers of One" thrive. We trust you to take ownership, deliver your best work, and grow your career here.

Work Arrangement

- Type: Remote
 - Location: Indonesia (to ensure time zone overlap and communication with the current team)
 - Work Environment: Home office, co-working space, or coffee shop — wherever you work best.
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Benefits & Perks

Our benefits are designed to support a well-balanced life and help you do your best work.

1. Paid Time Off
 - 17 days of vacation and personal leave per year.
 - Take a day off for any reason — whether to relax, travel, or recharge.
 2. Learning Benefits (Total Rp29 Million per Year)
 - Rp6 million per year for courses, books, or resources to boost your skills.
 - O'Reilly subscription worth Rp8 million per year for access to the latest tech, data, design, and business content.
 - Access to Rakamin Bootcamps and Short Courses worth Rp15 million per year to continuously upskill and reskill.
 3. Device Ownership
 - Annual Rp7 million budget to purchase any device that supports your productivity.
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Join Us

At Rakamin, you'll join a team that values craftsmanship, continuous learning, and impactful innovation.

If you're passionate about building scalable backend systems and exploring the intersection of AI and product engineering, we'd love to meet you.