

Job posting: Core Performance Developer

Job Title: Core Performance Developer

Company: Vespa.ai

Location: Trondheim, Norway

Are you passionate about open source, search and recommendation systems, and AI inference? Do you thrive on writing performant, high-quality code with strong latency and uptime requirements? Do you have a passion for proactive, continuous, and end-to-end application performance testing and monitoring? If so, we want you to join our team at Vespa.ai as a Core Performance Developer!

About Vespa.ai:

Vespa.ai is a team of passionate builders. We maintain and develop the Apache 2.0 licensed open-source project Vespa. Vespa lets our users combine data and AI online, at any scale, with unbeatable performance. We also develop and operate Vespa Cloud, a robust SaaS offering that allows businesses to harness the power of our technology with ease.

Vespa is a fully featured search engine and vector database. It supports vector search (ANN), lexical search, and search in structured data, all in the same query. Integrated machine-learned model inference allows users to apply AI to make sense of data in real time. Together with Vespa's proven scaling and high availability, this empowers to create production-ready search applications at any scale and with any combination of features. Our users include Spotify, Yahoo, Wix, and the leading e-commerce, social media, and financial service companies globally.

Role Overview:

As a Core Performance Developer, you will design, implement, and optimize core functionalities of Vespa, ensuring top-notch performance and reliability. Vespa is built using C++ and Java running on Linux, released 4 times a week, fully automated. Strong knowledge of low-level performance characteristics of the Linux kernel, C++ libraries, and the Java VMs is key..

You will work on challenging search and recommendation use cases, collaborating with a cross-functional team of engineers and developer advocates. This role will be particularly focused on both pro-actively and retro-actively identifying performance bottlenecks in our code, analyzing low-level performance issues for customers running Vespa, and play a key role in discussions on how to best implement new features without sacrificing performance and scalability.

At Vespa.ai, we are extremely focused on automating whatever we do to be able to grow fast with high quality. In all roles, we scale using technology, not simply larger teams. We take pride in being small, nimble, and the most productive.

Responsibilities:

- Architect, develop, and maintain essential components of the Vespa engine.
- Drive the overall performance strategy for Vespa, propose and drive development of new features relevant to performance.
- Optimize low-level design and code for performance and scalability.
- Collaborate with cross-functional teams to address the unique challenges posed by major use cases running on Vespa.

Qualifications:

- Bachelor's or Master's degree in Computer Science, Software Engineering, or a related field.
- Extensive experience in C++ and/or Java development with a focus on performance.
- Strong knowledge of algorithms and data structures.
- Proficient knowledge of performance characteristics of the Linux kernel with regards to e.g. I/O, memory bandwidth and CPU scheduling.
- Strong problem-solving skills and ability to thrive in a collaborative team environment.
- Familiarity with distributed systems.

Why Join Us:

- Be part of a cutting-edge team working on innovative technology.
- Work on use cases serving thousands of requests per second with low latency.
- Contribute to the development of an open-source platform with a global industry impact.
- Collaborate with a talented team of engineers, data scientists, and product experts.
- Competitive salary, benefits, and opportunities for professional growth.

If you are excited about the intersection of open source, search and recommendation systems, AI inference, and have a genuine passion for coding, we would love to hear from you! Apply now to join the Vespa Team and play a key role in shaping the future of our industry.

Note: Vespa.ai is an equal-opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees. We believe in fostering a collaborative and inclusive environment where every team member has the opportunity to make a significant impact.