

# Fermyon Delivered Fastest Edge Computing Platform

A WebAssembly pioneer powered the next wave of serverless with Akamai Cloud



Achieved cold starts of < 1 ms



Delivered a developer-first experience



Unlocked next-gen edge native apps

## Building the future of serverless on the fastest edge network

Fermyon Technologies is pioneering the next generation of cloud computing with WebAssembly (Wasm). Co-founded by a team of ex-Microsoft Azure engineers, Fermyon is rethinking the [serverless](#) paradigm by stripping away the performance trade-offs and language limitations of first-gen platforms. But to truly deliver sub-millisecond cold starts and edge native AI apps at global scale, Fermyon needed more than speed — it needed reach. That's where Akamai Cloud came in. As an Akamai Qualified Compute Partner, Fermyon is combining the agility of Wasm-based workloads with the performance and reliability of the world's largest distributed network to deliver the fastest serverless experience in the world.

## Turning cloud experience into innovation

Fermyon's founders set out to solve what they saw as core limitations in the first wave of serverless. While platforms like AWS Lambda and Azure Functions offered flexibility, they came with performance trade-offs: long cold starts and latency that slowed the end-user experience. On the flip side, edge native runtimes prioritize speed, but limit developers to lightweight scripts and specific languages like JavaScript.

Fermyon's vision? The best of both worlds. A robust, multilanguage serverless platform with cold start speeds under a millisecond and the ability to power full-stack apps, AI workloads, and dynamic content at the edge.



### Location

Longmont, Colorado  
[fermyon.com](https://fermyon.com)

### Industry

High Tech

### Solution

[Cloud Computing](#)

## Solving the delivery challenge with Akamai

To reach that goal, Fermyon partnered with Akamai to extend its Fermyon Wasm Functions compute innovation with unmatched network delivery. With this engine for serverless functions on Akamai Cloud, Akamai customers can easily pair Akamai services — such as Akamai EdgeWorkers, object storage, globally available CPU and GPU compute capabilities, bot detection, and CDN — with a Wasm-based serverless platform.

“We solved the compute side of the equation,” explained CEO Matt Butcher. “Akamai solved the delivery side. Together, we built the fastest serverless platform on the planet.”

## Running Wasm apps with unmatched performance

Fermyon’s lightweight Wasm running inside Akamai’s distributed architecture delivers a new breed of edge native computing. “Being deeply integrated into Akamai Cloud and Akamai services means we can perform upstream operations and handle certain EdgeWorkers’ requests,” said Butcher.

Fermyon Wasm Functions on Akamai Cloud make global workload distribution effortless: no region picking, no extra cost. Like [Kubernetes](#), this platform ensures high availability and performance worldwide by default. As a result, companies can deploy low-latency applications in minutes that run closer to the point where data is being created, analyzed, and stored.

Traditional serverless platforms are hindered by 200 ms to 500 ms delays. Fermyon launches Wasm functions in less than half a millisecond, enabling front-line serverless functions for extremely latency-sensitive workloads like streamed media.

“Every 10 ms we save matters,” said Butcher. “It reduces abandonment. It boosts engagement. And it builds trust.”

## Delivering a developer-first experience

Fermyon also makes it even easier to build edge native applications that not only outperform cloud native apps, but also are more cost efficient. Unlike edge runtimes that limit developers to JavaScript or TypeScript, Fermyon supports languages like Rust, Go, Python, and .NET. “Developers can go from blinking cursor to deployed application in two minutes or less,” said Butcher.

The Fermyon-Akamai partnership powers three key classes of applications:

- **Classic edge workloads:** Fast, lightweight tasks like authentication, request filtering, or header manipulation are handled at lightning speed by Wasm functions.
- **Edge native applications:** Full-scale platforms like content management systems (CMS) or digital experience platforms (DXPs) that run entirely at the edge deliver highly responsive, dynamic experiences worldwide.
- **AI at the edge:** With Akamai’s rollout of GPU edge zones, Fermyon enables AI inference closer to users, boosting speed and cutting latency.

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With Fermyon on Akamai, we’ve built what is now effectively the fastest serverless platform in the world.

— Matt Butcher  
CEO, Fermyon



“Our deep integration with Akamai Cloud and services means we provide access to the powerful Akamai ecosystem along with a fantastic developer experience and platform that delivers dynamic content to users in under the blink of an eye,” Butcher continued.

## Supercharging EdgeWorkers with Wasm compute

Akamai EdgeWorkers offer a fast, scriptable layer for request handling. Fermyon augments that by providing a robust compute upstream and handling intensive logic when needed.

“Think of EdgeWorkers making a snap decision,” said Butcher. “Fermyon can offload this technology by processing logic like AI inference, data orchestration, and multiservice calls upstream.”

## Delivering low-latency AI inferencing at the edge

Fermyon and Akamai are just getting started. With Akamai adding container support at the edge, the opportunity to run more complex workloads closer to users is expanding. Fermyon is also continuing to build its AI capabilities, leaning into Akamai’s GPU infrastructure to deliver low-latency, inference-driven services at scale. “Together, we are unlocking a new tier of cloud native, edge-first innovation,” said Butcher.

When summarizing the value of working with Akamai, Butcher underscored performance, reliability, and modularity: “Akamai provides the world’s fastest, largest, and most reliable network. And, through its partner ecosystem, it provides access to a range of building blocks that companies can use to create fairly advanced solutions without much heavy lifting. It’s one of Akamai’s superpowers,” he concluded.



Fermyon is leading the next wave of cloud computing with the first cloud native WebAssembly function as a service that lets developers build better serverless apps faster. Fermyon is focused on empowering cloud developers to quickly realize the things they are thinking about creating and to focus on the code that brings value instead of the obligatory foundation code. Fermyon was founded by the Deis Labs team at Microsoft Azure and is backed by Insight Partners and Amplify Partners.