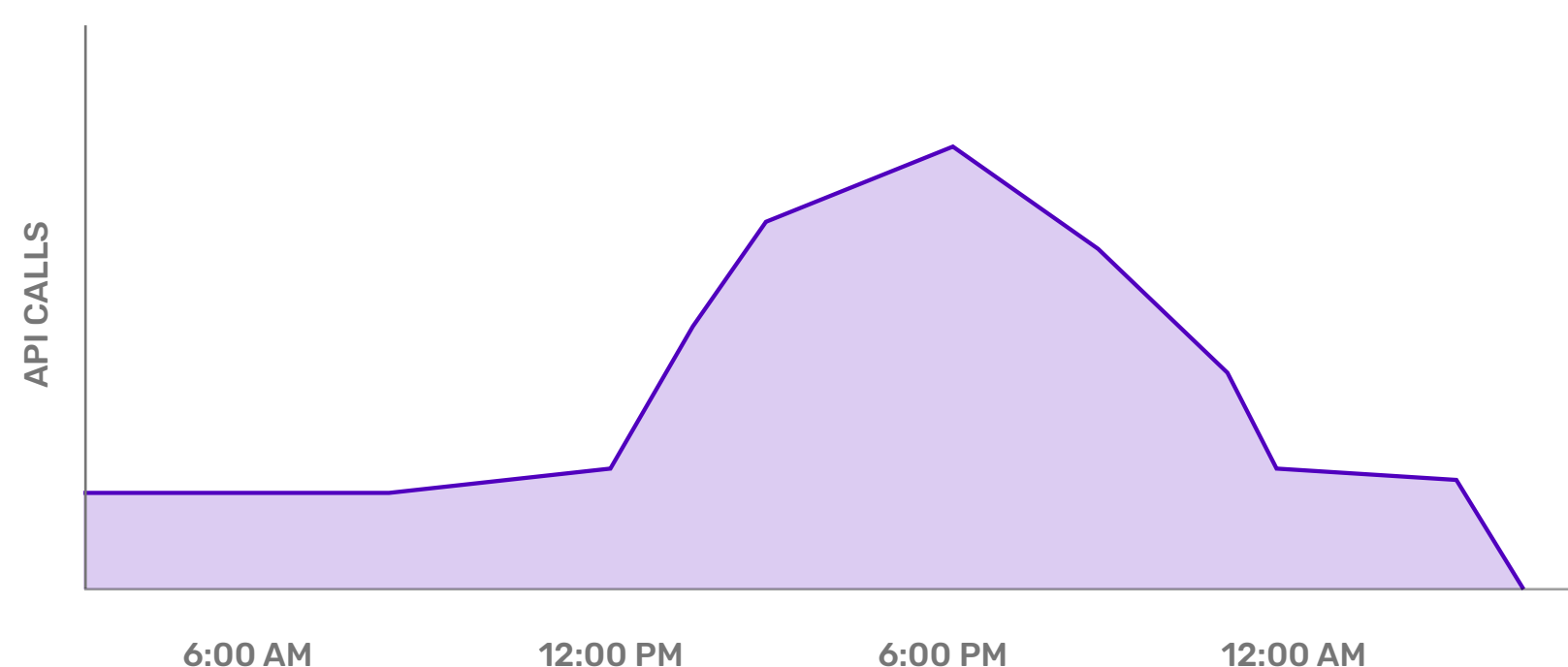# How Algorithmia's AI Layer supports an algorithm marketplace with over XXX,XXX developers

BACKGROUND

Algorithms are the building blocks of the modern economy, but there's no efficient way to share and consume them at scale. The AI Marketplace allows developers to share, discover and deploy models and algorithms from across disciplines, with a focus on Machine Learning and AI.

MACHINE LEARNING USE VARIES UNPREDICTABLY

CHALLENGE

The AI Marketplace is all about making it easy to create and consume algorithms, and part of that experience is running them reliably. That's not exactly a piece of cake.

Scaling Machine Learning is tough: unpredictable usage patterns, multiple language & framework requirements, and specialized GPU hardware can get complicated. It's a problem that even the best teams out there are still struggling to solve. To execute on the vision of a truly global algorithm marketplace, the AI Marketplace needed:

- Tolerance of unpredictable usage spikes (auto scaling)
- Instant deployment of models across various languages and frameworks
- <10 ms latency
- Highly efficient compute usage and scheduling

No existing solution was able to fill the AI Marketplace's requirements. So Algorithmia built the software platform that the AI Marketplace needed: one that's able to serve and manage a large and diverse set of models, functions, and algorithms.

Algorithmia's AI Layer was able to productionize all of the models on the marketplace, and continues to support extreme user growth and scale. Even at XXX,XXX users, the AI Layer keeps it as easy as git push to deploy any model at scale through the AI Marketplace. Here's how it works:

Infinite Auto Scaling
The AI Layer's serverless architecture scales way up and way back down seamlessly and automatically.

Little To No Latency
Enterprise grade SLA capabilities and lightning fast response times are part of Algorithmia's DNA

Any Language / Framework
The AI Layer deploys models as API endpoints that are buildable and accessible in any language or package.

Compute and Scheduling
The AI Layer offers CPUs and GPUs, and uses state of the art scheduling so you only pay for what you use.

"The AI layer allows you to rapidly prototype software at a ridiculous pace. You can quickly test across languages, frameworks, and hit the publish button to serve millions of requests on your iPhone app next week."

XXXX XXXXXXXX
ENGINEER AT ALGORITHMIA

"The combination of Algorithmia's AI Layer and the AI Marketplace allows developers to rely on ML models from across the world. A direct line of communication between users and creators empowers data scientists to quickly deploy updated versions of their models."

XXXXXXXX XXXX
DEV ADVOCATE AT ALGORITHMIA

Algorithmia's AI Layer supports the AI Marketplace's needs fully: it serves XXX,XXX of API calls per month across XXX,XXX of different algorithms and XXX,XXX of different countries. That's scale that rivals the biggest applications in the Fortune 500.

SCHEDULE A DEMO

Empower your Data Scientists with the platform that lets them focus on what matters: building great models. **Schedule a demo with our sales team** to see what the AI Layer can do to accelerate your Machine Learning roadmap.