Crater Labs
moonshots with impact!

About Customer
Toronto-based Crater Labs takes on high-risk, high-reward AI/ML projects to create lasting competitive advantage for its clients, providing the research acumen and infrastructure to do it cost-effectively.
www.craterlabs.io

Geo
North America

Industry
High Tech

Solution Area
Accelerate Core Applications
Activate Real-time Analytics
Enable Multi-cloud
Power Artificial Intelligence

Pure Storage®
Products in Use
FlashBlade®

Crater Labs Aims High and Fuels its Journey with Pure Storage

In 2017, Alexei Gavriline and Khalid Eidoo co-founded Crater Labs with a lofty goal—to help companies tackle their most ambitious, groundbreaking projects. With world-class AI and ML researchers and a high-performance computing infrastructure, Crater Labs makes it possible and profitable for clients to achieve their goals.

Data is at the center of every Crater Labs project. The company's researchers must be able to access, analyze, and move data at will as they run their experiments. Having maxed out capacity and performance on both cloud and direct attached storage, Crater Labs turned to Pure Storage.

Fueling AI/ML Research with Big Data

Crater Labs AI and ML solutions are making self-driving cars better at detecting cyclists and pedestrians; preventing

"Pure gives us credibility as we take on transformative AI initiatives for clients. It proves we understand what it takes to run high-risk, high-reward research projects successfully and cost-effectively."

ALEXEI GAVRILINE,
CO-FOUNDER & PRESIDENT, CRATER LABS

Impact on Crater Labs

Streamlines collaboration with clients on groundbreaking AI projects

Allows researchers to run experiments unimpeded for faster results

Supports a hybrid cloud strategy for both performance and flexibility

Challenges

Maxed-out storage left research teams waiting for experiments to run

Managing data in a hybrid-cloud environment required greater flexibility

The company constantly shuffled data to make space for new projects

Results

Accelerates research by running parallel workloads simultaneously

Easier to transfer and work with client data using Amazon S3 data stores

Simplifies storage management to spin up experiments quicker

fraud by spotting anomalies among billions of financial transactions; and sparking innovation in logistics, healthcare, telecom, and beyond.

Its researchers are central to this effort.

"We invest a lot in world-class research and development talent, and we need to make sure they can run their experiments without interruption or delay," says Alexei Gavriline, president of Crater Labs. "The faster they work, the faster we can move the needle for our clients."

The company needed high-performing infrastructure, but their direct attached storage was maxed out and couldn't keep up with the data-intensive workloads.

"We were burning out hard drives left and right because of the high I/O requirements of our applications," says CTO Khalid Eidoo. "We needed the flexibility and performance to handle parallel workloads across our hybrid cloud environment."

Delivering Transformative Results to Clients Faster

By adopting Pure Storage FlashBlade, Crater Labs combines the flexibility and abstraction of cloud storage with on-premises control and performance. That makes it easy to collaborate with clients on large-scale AI projects.

"Using [Amazon] S3-compliant data stores on FlashBlade, we can easily move data back and forth, accessing our clients' files with very low latency," says Eidoo. "Plus, initiating new experiments is quick—we simply spin up a container and point the volume to the FlashBlade. No more data shuffling."

Faster performance means Crater Labs can run multiple experiments simultaneously, allowing researchers to work unimpeded by resource constraints and deliver results faster. And researchers don't have to worry about losing data, as snapshots can be restored in minutes.

Using FlashBlade, research teams have helped clients analyze SEC data in three days instead of 10, calculate delivery routes for thousands of trucks in two-thirds less time, and detect billing anomalies with up to 93% accuracy for telco and utility companies.

Crater Labs Moves Ahead

Crater Labs looks to scale and expand its business globally with help from Pure.

"Pure gives us credibility as we take on transformative AI initiatives for clients," says Gavriline. "It proves we understand what it takes to run high-risk, high-reward research projects successfully and cost-effectively."

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