



Accelerating AI-Powered Research & Innovation

USE CASE

Overview

Santa Clara University's Computer Science and Civil Engineering departments are advancing groundbreaking projects in traffic safety, flood prediction, and AI-driven research. Faculty and students alike rely on HPC and AI infrastructure to power real-time insights, improve community resilience, and push the boundaries of academic innovation.

Challenges

As research expanded, the university faced growing demands on its data infrastructure. Challenges included:

- Supporting diverse AI workloads with low latency.
- Scaling seamlessly as research data multiplied.
- Keeping management overhead low for a small IT team.
- Meeting campus security and compliance requirements.

Solution

The university selected the **VDURA Data Platform V5000** to serve as the foundation of its AI research cluster. By deploying an all-flash system with a unified global namespace, Santa Clara gained:

- Sub-millisecond responsiveness to accelerate AI model training and inference.
- A single platform to scale from small projects to multi-petabyte research datasets.
- Seamless integration with campus security and IT standards.
- Minimal management overhead, freeing staff to focus on supporting innovation.

Results & Benefits

- **Accelerated research outcomes:** From real-time traffic incident captioning to predictive flood modeling, researchers deliver faster results that directly benefit the community.
- **Operational simplicity:** The platform requires minimal administration, allowing faculty and staff to dedicate more resources to research and teaching.
- **Future-ready growth:** Built-in scalability ensures that the university can expand capacity and performance.
- **Trusted foundation:** VDURA provides durable, secure, and reliable infrastructure.

About VDURA

VDURA offers a powerful, cost-efficient, and secure data platform for AI and HPC, supporting organizations in deploying resilient infrastructure at any scale. VDURA empowers universities, research labs, and enterprises to accelerate innovation and unlock the full potential of their data.