

About Customer

Gwangju Institute of Science and Technology (GIST) is a renowned research-intensive university in Korea. GIST ranked no.4 in citations per faculty in 2021 QS World Ranking and no.1 in 2020 startup achievements in Korea. www.gist.ac.kr

Geo

Asia Pacific, Japan

Industry State and Local Government and Education

Solution Area Power Artifical Intelligence

Pure Storage® Products in Use FlashBlade® AIRI® Pure1®

FlashBlade Optimizes GIST's Al Infrastructure

As a global institution leading education and research in science and technology, GIST sought to improve its AI computing facility so that students can conduct research more conveniently. Needing parallel infrastructure with proven results in numerous research cases, GIST chose Pure's AI-ready architecture and storage.

With AIRI powered by FlashBlade and NVIDIA's DGX A100, GIST enhanced its AI infrastructure and allowed students to conduct their research more efficiently and reliably. Pure1 also allowed the IT team to monitor storage anytime, anywhere, increasing the efficiency of infrastructure management. "You need to consider storage to drive the success of AI projects. FlashBlade processes large amounts of data reliably at high speed, allowing us to build an infrastructure that always provides the optimal performance."

JARGALSAIKHAN NARANTUYA, PROFESSOR, AI GRADUATE SCHOOL, GIST

Impact on GIST



Pays only for the capacity needed while cutting hardware costs up to 80%



Smaller infrastructure footprint reduces the burden of storage management



Accelerates ransomware and rapid disaster recovery with immutable snapshots

Challenges



Needed massively parallel and high-performance storage for AI research



Required a proven, easyto-operate infrastructure for a small IT team

Results



Delivers data faster to AI/ML applications, enhancing GPU utilization



Able to monitor and manage storage capacity and performance with ease



Supports NFS protocols, enabling swift delivery of data to storage and GPU

GIST Improves AI Computing Environment with AIRI on FlashBlade

GIST is a research-intensive university established by the South Korean government to drive the nation's IT innovations, promote industry-academic collaborations, and train elites who will lead the 4th industrial revolution. In line with Gwangju City's plan to establish the nation's first AI industrial cluster town consisting of data centers and testbeds to incubate AI startups, The AI graduate school of GIST is striving to nurture professionals who will lead this integrated AI complex.

To train these future experts and expedite their research, GIST wanted to improve its AI computing facility. To do this, GIST needed parallel storage that could quickly process large amounts of data for AI/ML workloads. GIST also required one that could be easily operated by its small IT team, and one that has proven its performance in research areas including automobile, energy, and healthcare.

FlashBlade's High Performance Empowers Al Researches

This led GIST to augment its AI computing cluster center with AIRI, a full-stack AI-ready infrastructure powered by FlashBlade and NVIDIA's DGX A100.

Designed to deliver maximum performance for unstructured data, FlashBlade's unified fast and object storage platform quickly delivered massive datasets to AI/ML applications, boosting GPU utilization. In addition, when students uploaded ML training data to the cluster center, the system immediately delivered data to storage and DGX servers using the NFS protocol, which in turn accelerated research projects for developing AI in automobile, healthcare and energy.

Thanks to FlashBlade's reliability and Pure1's real-time storage monitoring and predictive support, the IT team was able to manage the system with ease. "You need to consider storage to drive the success of AI projects. FlashBlade processes large amounts of data reliably at high speed, allowing us to build an infrastructure that always provides the optimal performance," shared project lead, Professor Jargalsaikhan Narantuya.

GIST to Lead R&D with AI-optimized Computing Environment

GIST's AI/ML projects are growing daily, but FlashBlade's unmatched performance and scalability allow GIST to meet them all with confidence. Leveraging this modern infrastructure, GIST plans to continue research in various fields to educate AI leaders of tomorrow and develop technologies for the future.

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