



Building greener businesses with AI.

How **Green S-Data** used Lenovo ThinkSystem, powered by NVIDIA® T4 Tensor Core GPUs, and Lenovo Intelligent Computing Orchestration to simplify and accelerate AI development for greener, more cost-efficient manufacturing.

Lenovo Infrastructure Solutions
for The Data-Centered

Lenovo

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Background

Green S-Data helps its clients harness the power of AI to make their businesses smarter, more efficient, and more profitable. The company provides AI consultancy and strategy services, and develops innovative solutions for automated optical inspection and defect detection on industrial production lines. Based in Venice, Italy, Green S-Data is a small startup with big ambitions.

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Challenge

When a local manufacturer approached Green S-Data to design, build, and train an AI model to support its product quality control measures, the company leapt into action.

Gianfranco Cellarosi, CTO at Green S-Data, elaborates: “We were tasked with building an AI-powered visual inspection system to automatically detect cosmetic and structural defects, and with training the model for multiple production environments. We immediately launched a search to find the right infrastructure.”



Finding the right fit.

Together with technology partner VM Sistemi, Green S-Data evaluated infrastructure solutions from several vendors. Lenovo Gold Business Partner VM Sistemi introduced Green S-Data to Lenovo's extensive range of AI-ready servers, and proposed a solution based on Lenovo ThinkSystem SR650 and the Lenovo Intelligent Computing Orchestration (LiCO) software stack.

"It was the perfect match," says Cellarosi. "Lenovo was the only vendor to offer an end-to-end solution with integrated support for popular AI frameworks, simple management interface, and robust, high-performance hardware."

Why Lenovo? Cost-effective, AI-ready solutions.

Green S-Data implemented a single Lenovo ThinkSystem SR650 server, equipped with five NVIDIA® T4 Tensor Core GPUs and four NVMe solid-state drives to maximize performance for AI, deep learning, and machine learning (ML) workloads.

Next, the company worked closely with VM Sistemi and Lenovo to deploy the Red Hat Enterprise Linux operating system and LiCO software.

Cellarosi comments: “VM Sistemi organized video calls with LiCO experts from Lenovo US whose advice and guidance were very helpful.”



“We have a great relationship with both the VM Sistemi and Lenovo teams, which has proven to be an extremely valuable partnership.”

Gianfranco Cellarosi
CTO, Green S-Data

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Results

Green S-Data is using the Lenovo platform to build and train an AI model capable of performing visual quality control for furniture and packaging manufacturers.

The LiCO software provides an easy-to-use graphical interface to deploy, monitor, and manage AI workloads. Integrated AI templates and neural networks help accelerate development and training. Finally, the intuitive, web-based dashboard enables even inexperienced users to perform complex data science.

Backed by Lenovo and NVIDIA technology, Green S-Data can develop AI solutions for clients quickly and cost-effectively—helping more businesses harness cutting-edge technology to drive greener, leaner operations.



Slashes time to market for AI and ML workloads



Minimizes IT management requirements



Delivers low storage latency and high compute performance cost-effectively



“The Lenovo ThinkSystem SR650 server delivers excellent performance, boosted by the NVIDIA® T4 Tensor Core GPUs. Combined with the LiCO software, it is the ideal platform for AI development and training.”

Gianfranco Cellarosi
CTO, Green S-Data

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