

# NVIDIA-CERTIFIED SYSTEMS

## Enabling the Secure, Hybrid Accelerated Data Center

AI is finding widespread adoption across industries—even those that have traditionally been slow to adopt new technologies. Whether it's early fraud detection in financial services or better forecasting in retail, business leaders are quickly realizing the benefits of AI.

To be successful, enterprises need a modern, coherent computing infrastructure from the data center to the edge that provides functionality, performance, security, and scalability to run all AI workloads. With NVIDIA-Certified Systems™, enterprises can confidently choose performance-optimized hardware and software solutions—backed by enterprise-grade support—to securely and optimally run their AI workloads, both in smaller configurations and at scale.

An NVIDIA-Certified System is one that conforms to NVIDIA's design best practices and has passed a set of certification tests that cover a range of use cases, including cluster testing.

The test cases cover deep learning training, AI inference, data science algorithms, intelligent video analytics, security, and network and storage offload. NVIDIA-Certified Systems are introduced with the NVIDIA Ampere architecture's A100 Tensor Core GPU, the latest NVIDIA® Mellanox® network adapters (ConnectX-6, ConnectX-6 Dx, and BlueField-2 DPU), the Quantum family of InfiniBand switches, and the Spectrum family of Ethernet switches and cables.

## Adoption Across Industries



### CONSUMER INTERNET

- > Ad personalization
- > Click-through-rate optimization
- > Churn reduction



### FINANCIAL SERVICES

- > Claim fraud
- > Customer service chatbots and routing
- > Risk evaluation



### HEALTHCARE

- > Clinical care
- > Operational efficiency
- > Accelerated drug delivery



### SUPPLY CHAIN AND INVENTORY MANAGEMENT

- > Price management and markdown optimization
- > Promo prioritization and ad targeting



### MANUFACTURING

- > Remaining useful life estimation
- > Failure prediction
- > Demand forecasting



### TELECOMMUNICATIONS













- > Network and security anomaly detection
- > Network performance forecasting
- > Network resource optimization



### AUTOMOTIVE

- > Intelligent customer interactions
- > Connected vehicle maintenance
- > Demand and capacity forecasting

# NVIDIA-CERTIFIED SYSTEMS FOR ALL WORKLOADS

 <p>AI TRAINING &amp; INFERENCE</p>	 <p>DATA ANALYTICS &amp; MACHINE LEARNING</p>	 <p>PROFESSIONAL VISUALIZATION</p>	 <p>VIRTUAL INFRASTRUCTURE</p>	 <p>HIGH PERFORMANCE COMPUTING</p>
<p><b>NVIDIA AMPERE ARCHITECTURE GPUs</b></p>  <p>A100</p>  <p>A40</p>	<p><b>NVIDIA SMARTNICs &amp; DPUs</b></p>  <p>BLUEFIELD-2</p>  <p>MELLANOX CONNECTX-6 Dx</p>	<p><b>NVIDIA INFINIBAND &amp; ETHERNET SWITCHES</b></p>  <p>MSN2100/2700/3700</p>		
 <p>EGX PLATFORM</p>		 <p>HGX PLATFORM</p>		

An NVIDIA-Certified System simplifies the configuration and deployment of AI-first infrastructure by providing the following key capabilities:

## A Unified AI Platform

- > Simplifies system deployment and reduces time to solution by ensuring that GPU-optimized software from the NGC™ catalog works out of the box.

## Performance Optimized

- > Tested and optimized for various workloads, including data analytics, deep learning, inference, and industry-specific workloads.

## Scalable

- > Enables faster time to solution by allowing you to scale up and scale out with NVIDIA Ampere architecture GPUs and NVIDIA Mellanox SmartNICs and switches.

## Built-in Security

- > NVIDIA Mellanox SmartNICs offer the ability to offload and accelerate multiple layers of network security.
- > Transport Layer Security (TLS) and Internet Protocol Security (IPsec) in-line cryptography to help secure AI workflows.

## Enterprise-Grade Support

- > NVIDIA offers direct access to subject matter experts with **NGC Support Services** enterprises can minimize system downtime during infrastructure deployment and maximize user productivity during development.