



NVIDIA QUADRO-POWERED MOBILE DATA SCIENCE WORKSTATION



THE POWER OF GPU-ACCELERATED DATA SCIENCE

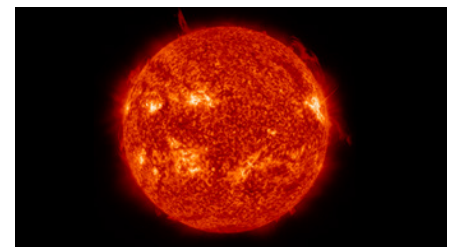
Data science workflows have traditionally been slow and cumbersome, relying on CPUs to prepare data and train and deploy models. NVIDIA GPUs and accelerated AI and data science software built on NVIDIA® CUDA-X AI™ speeds up data processing and machine learning to maximize performance, productivity, and ROI.



GPU-accelerated machine learning enables Walmart to deliver products faster, react to shopper trends in real time, and scale inventory cost savings.






American Airlines uses GPU-accelerated data science to recapture millions of dollars of lost cargo revenue by confirming shipments, rebooking cancellations, and optimizing cargo space.



With NVIDIA GPU-accelerated data science workstations, NASA has reduced the processing of over 6 petabytes of image data from 100 years of CPU compute to less than a week.




Challenges with Traditional Setups

Many data scientists use laptops as part of their daily workflow. These laptops mainly serve as clients to servers or cloud instances as they don't have the compute power required for data science workloads.

Data Center	Laptop	CSP	Data Center	Cloud Service Provider (CSP)
 ✓ compute workload	 ✗ compute workload	 ✓ compute workload	<ul style="list-style-type: none"> > Competition for resources with other jobs > Slower model iteration process > Software stack needs IT management and support 	<ul style="list-style-type: none"> > Expensive for everyday development > Slow data migration and costly data storage > Security and privacy concerns

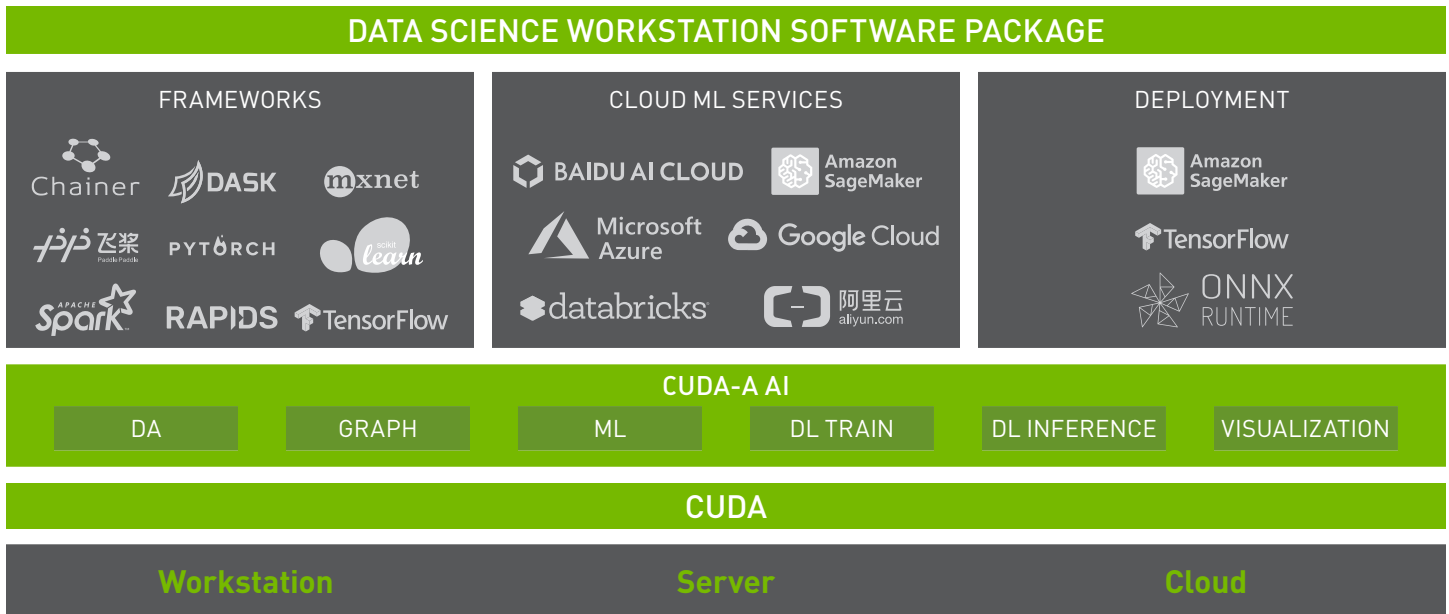
New Breed of Mobile Workstations

Mobile workstations equipped with NVIDIA Quadro® GPUs and the **NVIDIA-accelerated data science software stack** enable compute-intensive data science tasks to be done anywhere. Explore data and features, train and validate models directly on your laptop, and access server and cloud compute resources for full data prep, training, or deployment.

Data Center	Mobile Data Science Workstation	CSP	Key Advantages
 ✓ compute workload	 ✓ compute workload	 ✓ compute workload	<ul style="list-style-type: none"> > Desktop-level performance with Quadro RTX™ 5000 > Highly optimized stack of GPU-accelerated data science tools and libraries > Same NVIDIA data science software stack runs on laptop, server, and cloud—for a seamless transition from development to training and deployment > Ability to work from anywhere, even without connectivity to the data center or cloud

NVIDIA-Accelerated Data Science

NVIDIA is powering data science breakthroughs by leveraging the massively parallel compute capabilities of NVIDIA GPUs with optimized software built on NVIDIA CUDA-X AI. This collection of software-acceleration libraries built on top of NVIDIA CUDA® provides optimizations for AI, deep learning, machine learning, and high-performance computing.

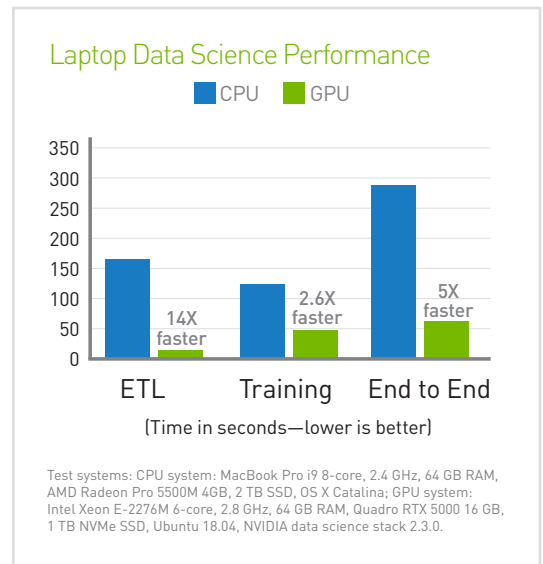


The Mobile Data Science Workstation Advantage

Quadro-equipped mobile data science workstations provide significant advantages over laptops. With sleek, modern designs featuring Quadro RTX 5000 GPUs, large memory, and NVIDIA GPU-accelerated data science software, these mobile workstations are what data scientists need to maximize productivity from anywhere.

	Mobile Data Science Workstation	Laptop (Windows/macOS)
Quadro RTX 5000 16 GB GPU	✓	—
NVIDIA GPU-accelerated data science software stack	✓	—
Up to Xeon CPUs	✓	—
Up to 128 GB of random access memory (RAM) with error-correcting code (ECC)	✓	—
Sleek, modern design	✓	—
Enterprise-level support	✓	—

Performance Advantage



Data Science Anywhere

NVIDIA Quadro-powered mobile data science workstations let you work on data science projects anywhere. With powerful RTX GPUs that can take advantage of NVIDIA's accelerated data science software stack, the power to tackle AI workloads is truly in your hands.

Learn more about Quadro-powered solutions, including Quadro Data Science-powered workstations at:

[nvidia.com/data-science-workstation](https://www.nvidia.com/data-science-workstation)

[nvidia.com/en-us/design-visualization/quadro-in-laptops/](https://www.nvidia.com/en-us/design-visualization/quadro-in-laptops/)

© 2020 NVIDIA Corporation. All rights reserved. NVIDIA, the NVIDIA logo, CUDA, CUDA-X AI, Quadro, and Quadro RTX are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. All other trademarks and copyrights are the property of their respective owners. AUG20

