

DELLTechnologies

Workstations for AI





ARTIFICIAL INTELLIGENCE WORKSTATION USE CASES

Dell provides dependable, professional grade tools that are essential to delivering Artificial Intelligence initiatives on schedule, and on your terms.



DATA SCIENTIST

From initial planning and data wrangling to prototyping and production — enjoy balanced performance to support your AI initiatives.

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MOBILE DATA SCIENTIST

Take workstation performance with you to support your AI initiatives however and wherever they evolve.

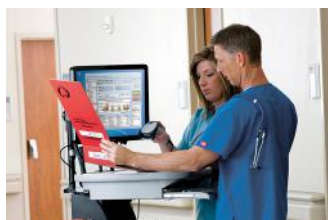
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AI DEVELOPER

Develop more intelligent services by incorporating Machine Learning algorithms into your applications.

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AI OPERATIONS

Beyond development and training, Inference is where AI goes to work. Deploy your trained models with confidence, knowing that your workstation can Inference in parallel, while running alongside your most demanding applications.

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DATA AND AI TEAMS

Equip your teams with sufficient horsepower to train massive data sets, regardless of the systems they're equipped with.

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Data Scientist

EQUIP YOURSELF TO TACKLE THE MOST COMPLEX DATA SCIENCE INITIATIVES AND DEMANDING SCHEDULES.



Massive data and AI power

A Dell Precision Tower workstation will provide ultimate scalability and performance for your analytics and AI initiatives. Dell delivers data scientists comprehensive hardware solutions that are optimized to run the industry's latest AI software, including Data Science software suites validated on Dell Precision Data Science Workstations (DSWs) that can be downloaded and installed with ease.

Iterate and experiment freely to master artificial intelligence and data science initiatives.



A



B



D



E

Solution recommendations for Data Scientists

- A. Dell Precision 7920 Tower Workstation with NVIDIA RTX™ Pro graphics and Intel Xeon® processors
- B. Dell Precision 5820 Tower Workstation with NVIDIA RTX™ Pro graphics and Intel Xeon® processors
- C. Data Science Software from Intel® or NVIDIA*
- D. Dell UltraSharp 40 Curved Monitor –U4021QW
- E. Dell UltraSharp 27 USB-C Monitor – U2719DC
- F. Dell Premier Wireless Keyboard and Mouse – KM717*

*Not pictured

Mobile Data Scientist

FREEING YOU TO TACKLE THE MOST COMPLEX DATA AND ARTIFICIAL INTELLIGENCE INITIATIVES — ON THE ROAD OR AT HOME.



Meet Data Science project deadlines, from anywhere, and on your terms

Whether you're still grappling with your data pipeline, bogged down training large data sets, or already prepared to Inference against trained models — Dell Precision 7000 Series mobile workstations have the computational and data horsepower to allow you to experiment and innovate rapidly, with the flexibility to do so almost anywhere.

Obtain maximum performance and portable flexibility for demanding data science and Artificial Intelligence workflows.



A



B



C



E



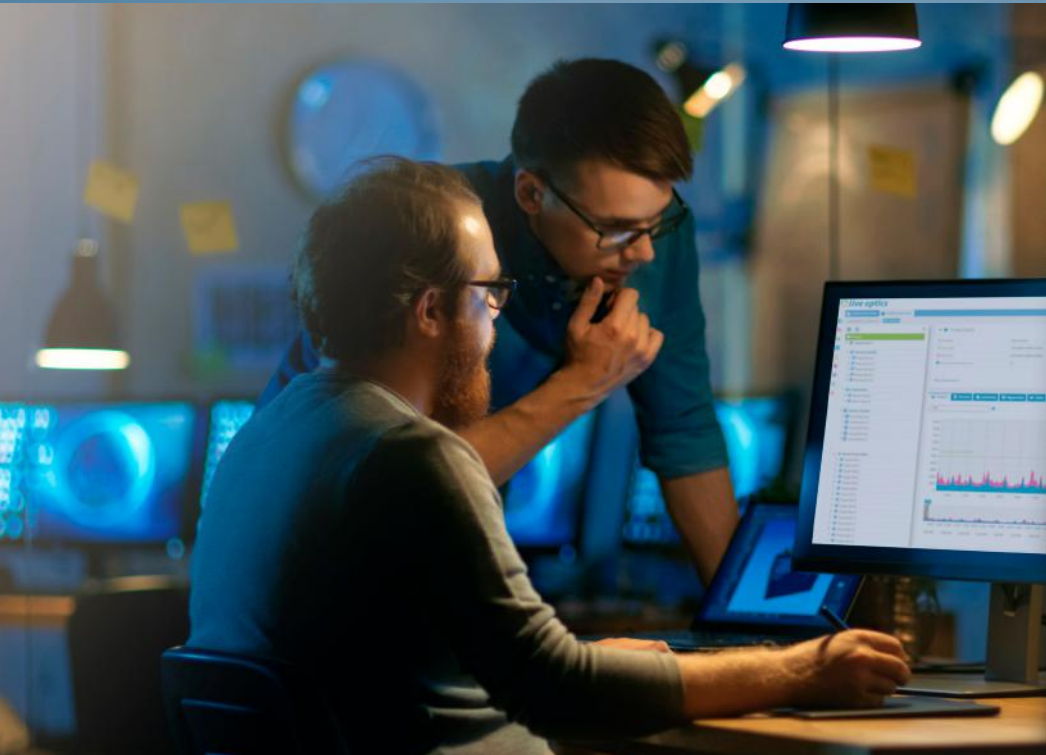
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Solution recommendations[†]

- A. Dell Precision 7560 Mobile Workstation
- B. Dell Precision 7760 Mobile Workstation
- C. Dell UltraSharp 40 Curved Monitor –U4021QW
- D. Dell Premier Wireless Keyboard and Mouse – KM717
- E. Dell Thunderbolt™ Dock – WD19TB
- F. Data Science Software from NVIDIA or Intel

AI Developer

DEVELOP MORE INTELLIGENT SYSTEMS WITH WORKSTATIONS
POWERING YOUR MOST AMBITIOUS AI INITIATIVES.



Develop with Intelligence

Whether you're building new services from the ground up, or responsible for breathing new life into a decades-old application, You'll probably have to incorporate some form of Artificial Intelligence into your next release. Dell Precision Data Science Workstations can provide you with the power you need to accelerate these new development challenges, whether wrangling massive amounts of unstructured data or training complex algorithms against it — helping you compile your finished jobs with agility and ahead of schedule.

Develop new AI initiatives with agility and ahead of schedule.



A



B



C



D



E

Solution recommendations†

- A. Dell Precision 5820 Tower Workstation
- B. Dell Precision 7000 Series Mobile Workstations
- C. Dell UltraSharp 40 Curved Monitor –U4021QW
- D. Dell Thunderbolt™ Dock – WD19TBS
- E. Dell Premier Wireless Keyboard and Mouse – KM717
- F. Data Science Software from NVIDIA or Intel

AI Operations

PUT AI TO WORK BY ADDING AI CAPABILITIES INTO YOUR ALREADY DEMANDING WORKFLOWS WITH A PRECISION WORKSTATION.



Unleash your full potential with AI

As AI is increasingly incorporated into our lives, many professionals already performing jobs that are demanding enough to require workstations will find those systems now incorporate AI algorithms. While these models are typically deployed pre-trained (Inference), they'll require additional computational power, often demanding new types of resources such as GPU accelerators or Intel processors with DLBoost capabilities.

Dell Precision Data Science Workstations provide the agility needed to tackle these demanding split workloads, unleashing new possibilities offered by AI, while continuing to provide dependable performance for professional applications.

Incorporate the power of Artificial Intelligence in your already demanding workstation operations.



Solution recommendations†

- A. Dell Precision 3000 Series Tower or Mobile Workstations
- B. Dell UltraSharp 49 Curved Monitor – U4919DW
- C. Dell Thunderbolt™ Dock – WD19TBS
- D. Dell Premier Wireless Keyboard and Mouse – KM717

Data and AI Teams

EMPOWER YOUR TEAM TO DELIVER DATA SCIENCE AND AI INITIATIVES FLEXIBLY AND WITH MINIMAL DISRUPTION.



Develop remotely without worry

A shared workstation makes sense for a number of reasons: some staff prefer to carry systems too thin and light for Data Science jobs, others are unfamiliar with operating systems data science typically runs on, some won't want their systems tied up for hours or days training models — the Precision 7920 Rack addresses all of these scenarios.

The Precision 7920 Rack workstation delivers the highest level of secure remote access, unleashing ultimate AI and Data Science performance that can be shared easily and efficiently by your team.

Equip your teams with the most powerful AI workstations, without changing the systems they already use and love.

A



B



C



Solution recommendations†

- A. Dell Precision 7920 Rack Workstation and a mobile workstation for a remote solution
- B. Dell Thunderbolt™ Dock – WD19TBS
- C. Dell UltraSharp 49 Curved Monitor – U4919DW
- D. Data Science Software from NVIDIA or Intel

Data Science Software

ENJOY EASY INSTALLATION AND OUTSTANDING PERFORMANCE WITH NVIDIA OR INTEL ACCELERATED DATA SCIENCE SOFTWARE.



Start AI Quickly. Run AI Faster.

Eliminate the hassles, testing, headaches and guessing that's typically associated with deploying AI software by choosing a Dell Precision Data Science Workstation configuration. These systems have been validated and optimized in a collaborative effort between Intel, NVIDIA, Microsoft, Canonical Ltd and Dell Technologies — to ensure that your AI hardware and software will provide accelerated performance and productivity without costly headaches.

Dell Precision Data Science Workstations come from the factory with Microsoft Windows or Ubuntu Linux preinstalled and validated to run the latest data science software from NVIDIA and Intel. Plus Dell provides documentation, best practices, and links to the latest Data Science software suites, making it easy to get up and running — especially for users unfamiliar with Data Science or Linux.

Featuring Intel® Xeon® Scalable Processors

ERROR CORRECTING CODE MEMORY

Essential for Data Science and Artificial Intelligence work, ECC memory helps detect & correct single-bit memory errors which can lead to data corruption or cause system crashes. This capability requires Intel® Xeon® CPUs with ECC capable motherboard & RAM.

DEEP LEARNING BOOST (DLBOOST)

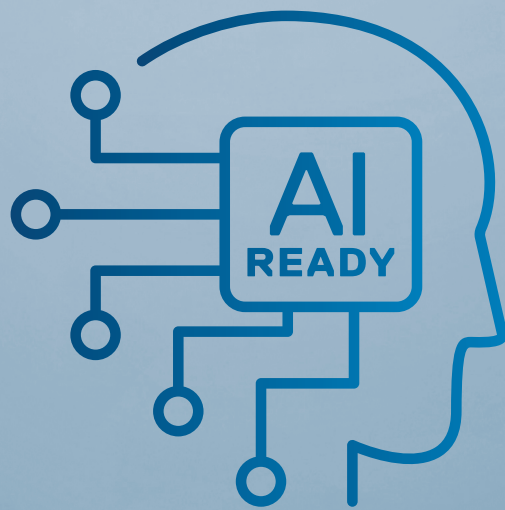
Intel® Xeon® Scalable processors built to run complex AI workloads on the same hardware as existing workloads, yielding faster insights — with up to 14x accelerated Inference. Optimized for the most popular AI frameworks (PyTorch, TensorFlow, MXNet, PaddlePaddle, and Caffe), DLBoost is ideal for AI workloads like; Image recognition, speech recognition natural language processing, and recommendation engines.



Secure smarter, faster experiences with Dell professional grade tools

Learn more about Dell's AI and Data Science Workstation solutions at www.dell.com/dellprecisiondsw
AI workstation solutions at Delltechnologies.com/en-us/ai-technologies/index.html





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† Some options may not be available in all regions.
* Not pictured