D¢LLTechnologies

Workstations for Al

CREATE WITHOUT LIMITS.





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.

Page 3



AI DEVELOPER

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

Page 4



MOBILE DATA SCIENTIST

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

Page 5



AI OPERATIONS

Beyond development and training, Inference is where Al goes to work. Deploy your trained models with confidence, knowing that your workstation can Inference in parallel, while running alongside your most demanding applications. Page 6



DATA AND AI TEAMS

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

Page 7

Data Scientist

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



Massive data and Al power

A Dell Precision 7920 Tower workstation will provide ultimate scalability and performance for your analytics and Al initiatives. Dell delivers data scientists a comprehensive hardware solution that's been optimized to run the latest Al software, including the Data Science Workstation (DSW) software suite that can be downloaded and installed with ease.

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



Solution recommendations for Data Scientists

- A. Dell Precision 7920 Tower Workstation with NVIDIA Quadro RTX™ 8000 Graphic Card, or
- B. Dell Precision 5820 Tower Workstation with NVIDIA Quadro RTX[™] 6000 Graphic Card
- C. Data Science Software Stack from NVIDIA*
- D. Dell UltraSharp 38 Curved Monitor U3818DW, or
- 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.



Solution recommendations[†]

- A. Dell Precision 7550 Mobile Workstation, or
- B. Dell Precision 7750 Mobile Workstation
- C. Dell UltraSharp 38 Curved Monitor U3818DW
- D. Sonnet External Graphics Accelerator*
- E. Dell Premier Wireless Keyboard and Mouse KM717
- F. Dell Thunderbolt™ Dock WD19TB
- G. Data Science Software Stack from NVIDIA*

*Not pictured

Al 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 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 Al initiatives with agility and ahead of schedule.



Solution recommendations[†]

- A. Dell Precision 5820 Tower Workstation, or
- B. Dell Precision 7550 Mobile Workstation
- C. Dell UltraSharp 38 Curved Monitor U3818DW
- D. Dell Thunderbolt™ Dock WD19TB
- E. Dell Premier Wireless Keyboard and Mouse KM717
- F. Data Science Software Stack from NVIDIA*

Al Operations

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

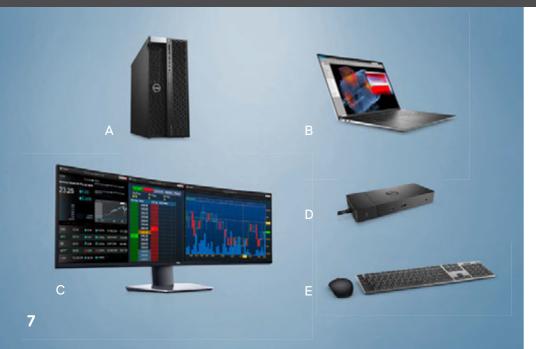


Unleash your full potential with Al

As Al is increasingly incorporated into our lives, many professionals already performing jobs that are demanding enough to require workstations will find those systems now incorporate Al 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 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 5820 Tower Workstation, or
- B. Dell Precision 5750 Mobile Workstation
- C. Dell UltraSharp 49 Curved Monitor U4919DW
- D. Dell Thunderbolt™ Dock WD19TB
- E. Dell Premier Wireless Keyboard and Mouse KM717

Data and Al 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 Al and Data Science performance that can be shared easily and efficiently by your team.

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



Solution recommendations†

- A. Dell Precision 7920 Rack Workstation, or
- B. Dell Precision 5550 Mobile Workstation
- C. Dell Thunderbolt™ Dock WD19TB
- D. Dell UltraSharp 49 Curved Monitor U4919DW
- E. Data Science Software Stack from NVIDIA*

Data Science Software Stack from NVIDIA

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



Start Al Quickly. Run Al Faster.

Eliminate the hassles, testing, headaches and guessing that's typically associated with deploying Al software by choosing an Al-Ready Precision configuration. These systems have been validated and optimized in a collaborative effort between NVIDIA corporation, Canonical Ltd (the company behind Ubuntu) and Dell Technologies — to ensure that your Al hardware and software stack will run fast and without headaches.

Al-Ready Precision workstations can come from the factory with Ubuntu Linux preinstalled. Dell provides documentation, best practices, and links to the latest Data Science Software Stack form NVIDIA, 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.

<u>DEEP LEARNING</u> 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, and recommendation engines.



Secure smarter, faster experiences with Dell professional grade tools





Copyright © 2020 Dell Inc. or its subsidiaries. All Rights Reserved. Dell, EMC, Dell EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries.

Other trademarks may be trademarks of their respective owners.