

TITAN V: Now NVIDIA is talking deep-learning horsepower

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Credit: NVIDIA

(Tech Xplore)—'Desktop GPU' is a phrase that could take scientific researchers places, with NVIDIA in the frontlines of their newcomer, TITAN V. This is a graphics card created for the PC.

VentureBeat's Blair Frank said "The new Titan V card will provide customers with a Nvidia Volta chip that they can plug into a desktop [computer](#)."

Thursday marked its debut, positioned as "the world's most powerful GPU for the PC." CEO Jensen Huang did the introduction. The announcement took place at the annual AI gathering, the NIPS (Neural Information Processing Systems) conference. It can carry massive amounts of power and speed AI computation.

NVIDIA also said that TITAN V users can gain access to GPU-optimized AI, deep learning and HPC software. They can sign up for an NVIDIA GPU Cloud account. This container registry includes NVIDIA-optimized deep learning frameworks, third-party managed HPC applications, NVIDIA HPC visualization tools and NVIDIA TensorRT inferencing optimizer.

TITAN V's target users include those who could use their PCs to do work in AI, deep learning and high performance computing.

Forbes said the target would be "machine learning scientists who use desktop PCs." Patrick Moorhead said, "TITAN V is targeted at machine learning scientists who want to conveniently buy the card and install it into their desktop PC. This means the researcher doesn't need a special server, storage or networking. Machine learning workloads favor heavy-duty matrix math operations which require massive memory bandwidth and this is what TITAN V [delivers](#)."

Peter Bright, *Ars Technica*, also commented on who could make use of

Titan V. "The high price and compute focus mean that in spite of its physical appearance, the Titan V is aimed pretty squarely at the 'Pro' side of the 'prosumer' customer that the Titan line has traditionally been aimed at. It's inevitable that some deep-pocketed gamers will pick up a Titan V and use it as nothing more than a graphics card, but that's certainly not the core [market](#)."

TITAN is based on the company's Volta architecture. "TITAN V's Volta architecture features a major redesign of the streaming multiprocessor that is at the center of the GPU," said the company.

Volta delivers over 100 Teraflops per second (TFLOPS) of deep learning performance. The company news release said that its 21.1 billion transistors deliver 110 teraflops of power, 9x that of its predecessor, and extreme energy efficiency.

It has 12 GB of High-Bandwidth Memory or HBM2, and JC Torres in *SlashGear* said it is touted as the next evolution of graphics memory.

The company said, "Humanity's moonshots like eradicating cancer, intelligent customer experiences, and self-driving vehicles are within reach of this next [era](#) of AI."

"All told," said Frank in *VentureBeat*, "the move is supposed to help people get off the ground with machine learning systems and iterate faster on systems that could help them solve business problems and drive the field of AI forward."

The price is \$2,999 and the company said it is available for purchase from the NVIDIA store in participating countries.

More information: nvidianews.nvidia.com/news/nvidia-announces-titan-v-ai-supercomputer

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