

NVIDIA Paves Path to AI Cities with Metropolis Edge-to-Cloud Platform for Video Analytics

50+ AI City Partners Using NVIDIA Deep Learning for Real-Time Insights, Making Communities Safer and Smarter, Improving Traffic and Resource Usage

Paving the way for the creation of AI cities, NVIDIA today unveiled the [NVIDIA Metropolis™](#) intelligent video analytics platform.

Metropolis makes cities safer and smarter by applying deep learning to video streams for applications such as public safety, traffic management and resource optimization. More than 50 NVIDIA AI city partner companies are already providing products and applications that use deep learning on GPUs, many of which will be on display this week at the [GPU Technology Conference](#).

"Deep learning is enabling powerful intelligent video analytics that turn anonymized video into real-time valuable insights, enhancing safety and improving lives," said Deepu Talla, vice president and general manager of the Tegra business at NVIDIA. "The NVIDIA Metropolis platform enables customers to put AI behind every video stream to create smarter cities."

Video Is World's Largest Data Source

Video is the world's largest generator of data, captured by hundreds of millions of cameras deployed in areas such as government property, public transit, commercial buildings and roadways. By 2020, the cumulative number of cameras is expected to rise to approximately 1 billion.

Humans currently monitor only a fraction of captured video, with most stored on disks for later review. Initial efforts at real-time video analytics techniques have proved far less reliable than human interpretation. Intelligent video analytics solves this challenge by using deep learning in cameras, on-premises video recorders and servers, and in the cloud to monitor video instantaneously with accuracy and scalability.

Metropolis spans multiple NVIDIA products that operate on a unified architecture.

High-performance deep learning inferencing happens at the edge with the [NVIDIA Jetson™ embedded computing platform](#), and through servers and data centers with [NVIDIA® Tesla® GPU accelerators](#). Rich data visualization is powered by [NVIDIA Quadro® professional graphics](#). And the entire edge-to-cloud platform is supported by NVIDIA's rich software development kits, including [JetPack](#), [DeepStream](#) and [TensorRT™](#).

Growing AI City Partner Support

More than 50 NVIDIA AI city partners already help customers reveal insights and take real-time action using deep learning on NVIDIA GPUs. Among them are industry leaders such as [Avigilon](#), [Dahua](#), [Hanwha Techwin](#), [Hikvision](#) and [Milestone](#).

"With the fast-paced environment of a city, there are a near infinite number of activities taking place," said Dr. Mahesh Sapharishi, chief technology officer at Avigilon. "We're excited by the potential of NVIDIA's Metropolis platform, as Avigilon continues to deliver AI-powered surveillance solutions and video analytics that focus users' attention on what matters most, in order to take action."

"NVIDIA's end-to-end Metropolis platform can be applied to video streams to create smarter and safer applications for a variety of industries -- from transportation to commercial," said Shiliang Pu, president at Hikvision Research Institute. "The benefit of GPU deep learning is that data can be analyzed quickly and accurately to drive deeper insights."

"City management customers using Milestone's upcoming Video Processing Server with NVIDIA Metropolis are positioned to take the lead in the adoption of deep learning for video-enabled IoT devices," said Bjørn Skou Eilertsen, chief technology officer at Milestone Systems. "Unleashing the value of this metadata will provide intelligent insights to take smart action."

See the AI City at GTC 2017

See how the NVIDIA Metropolis platform is transforming public safety and AI cities at [GTC 2017](#) through May 11 at the San Jose Convention Center.

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About NVIDIA

[NVIDIA](#)'s (NASDAQ: NVDA) invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined modern computer graphics and revolutionized parallel computing. More recently, GPU deep learning ignited modern AI -- the next era of computing -- with the GPU acting as the brain of computers, robots and self-driving cars that can perceive and understand the world. More information at <http://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: the impact and benefits of NVIDIA Metropolis, deep learning and NVIDIA's AI city partner products and services; GPU Technology Conference offerings; and the expected number of cameras by 2020 are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the reports NVIDIA files with the Securities and Exchange Commission, or SEC, including its Form 10-K for the fiscal period ended January 29, 2017. Copies of reports filed with the SEC are posted on the company's website and are available from NVIDIA without charge. These forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, NVIDIA disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

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