Volvo Group partners with NVIDIA to develop advanced AI platform for autonomous trucks

The Volvo Group has signed an agreement with NVIDIA to jointly develop the decision making system of autonomous commercial vehicles and machines. Utilizing NVIDIA’s end-to-end artificial intelligence platform for training, simulation and in-vehicle computing, the resulting system is designed to safely handle fully autonomous driving on public roads and highways.

The solution will be built on NVIDIA’s full software stack for sensor processing, perception, map localization and path planning, enabling a wide range of possible autonomous driving applications, such as freight transport, refuse and recycling collection, public transport, construction, mining, forestry and more.

“Automation creates real-life benefits for both our customers and the society in terms of safety, energy efficiency and as a consequence productivity. We continue to gradually introduce automated applications in the entire spectrum of automation, from driver support systems to fully autonomous vehicles and machines. This partnership with NVIDIA is an important next step on that journey,” says Martin Lundstedt, President and CEO of the Volvo Group.

The partnership with NVIDIA will focus on the development of a flexible, scalable Autonomous Driving System, which is planned to be used first in commercial pilots and later in commercial offerings from the Volvo Group. The agreement signed between the Volvo Group and NVIDIA is a long-term partnership spanning several years. Work will begin immediately with personnel from the two companies being co-located in Gothenburg, Sweden and Santa Clara, California.

“Trucking is the world’s largest network – a network that through online shopping puts practically anything, anywhere in the world, quickly within our reach,” says Jensen Huang, NVIDIA founder and CEO. “The latest breakthroughs in AI and robotics bring a new level of intelligence and automation to address the transportation challenges we face. We are thrilled to partner with Volvo Group to reinvent the future of trucking.”

“Automation is a key technology area for the Volvo Group. With this partnership we will further increase our speed of development and strengthen our long-term capabilities and assets within automation, to the benefit of our customers in different segments and markets,” says Lars Stenqvist, Volvo Group Chief Technology Officer.
The strategic partnership covers end-to-end computing fundamental to autonomous vehicles. It includes accelerated computing technology in the datacenter for training deep neural networks; large-scale simulation for hardware-in-the-loop testing and validation of autonomous vehicle systems; and finally deployment of the NVIDIA DRIVE platform in the vehicle running the full software stack for 360-degree sensor processing, mapping and path planning.

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About Volvo Group
The Volvo Group drives prosperity through transport solutions, offering trucks, buses, construction equipment, power solutions for marine and industrial applications, financing and services that increase our customers’ uptime and productivity. Founded in 1927, the Volvo Group is committed to shaping the future landscape of sustainable transport and infrastructure solutions. The Volvo Group is headquartered in Gothenburg, Sweden, employs 105,000 people and serves customers in more than 190 markets. In 2018, net sales amounted to about SEK 391 billion (EUR 38.1 billion). Volvo shares are listed on Nasdaq Stockholm.

About NVIDIA
NVIDIA (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.