CaLLM, Cool and Connected: Cerence Uses Generative AI to Transform the In-Car Experience

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AI-powered mobility innovator collaborates with NVIDIA to create next-generation in-vehicle experiences.

By Norm Marks, Global Vice President - Automotive Industry at NVIDIA

The integration of AI has become pivotal in shaping the future of driving experiences. As vehicles transition into smart, connected entities, the demand for intuitive human-machine interfaces and advanced driver assistance systems has surged.

In this journey toward automotive intelligence, Cerence, a global leader in AI-powered mobility solutions, is tapping NVIDIA's core expertise in cloud and edge technologies to redefine the in-car user experience.

In a recent video, Iqbal Arshad, chief technology officer of Cerence, emphasized the point, stating: "Generative AI is the single biggest change that's happening in the tech industry overall."

The cornerstone of Cerence's vision lies in the development of its automotive-specific Cerence Automotive Large Language Model, or CaLLM. It serves as the foundation for the company's next-gen in-car computing platform, running on NVIDIA DRIVE.

The platform, unveiled in December, showcases the future of in-car interaction, with an automotive- and mobility-specific assistant that provides an integrated in-cabin experience.

"We have datasets from the last 20 years of experience working in the automotive space," Iqbal said. "And we're able to take that data and make that an automotive-ready LLM."

Generative AI a Game-Changer for the Automotive Industry

Generative AI enables vehicles to comprehend and respond to human language with remarkable accuracy, revolutionizing the way drivers interact with their cars.

Whether it's initiating voice commands for navigation, controlling infotainment systems or even engaging in natural language conversations, generative AI opens a realm of possibilities for creating more convenient and enjoyable driving experiences.

Cerence is striving to empower vehicles with the cognitive capabilities necessary to seamlessly assist drivers in navigating their daily routines.

The company leverages NVIDIA DGX Cloud on Microsoft Azure, providing dedicated, scalable access to the latest NVIDIA architecture, co-engineered at every layer with Microsoft Azure, optimized for peak performance in AI workload training. NVIDIA's inferencing technology helps

Cerence deliver real-time performance, facilitating seamless user experiences.

As Cerence sees it, the future is one of intelligent driving, where vehicles aren't just modes of transportation, but trusted companions on the road ahead.

"Generative computing is going to change your in-car experience," said Iqbal.

With generative AI at its core, driving will evolve into a personalized, connected and, ultimately, safer experience for all.

This post originally appeared on NVIDIA's blog and is available at https://blogs.nvidia.com/blog/cerence-generative-ai-in-car-experience/?ncid=so-link-853809.