# Nvidia's Ali Kani warns that fully autonomous vehicles are still years away



In a recent interview with Autocar, Ali Kani, head of Nvidia’s automotive division, expressed that fully autonomous vehicles are "not close" to being integrated into public roads and are unlikely to see widespread use until well into the next decade. Nvidia, a leading technology company based in California, has positioned itself at the forefront of the automotive industry by developing advanced computing systems and software that support self-driving technology in vehicles manufactured by prominent firms such as JLR, Mercedes-Benz, and Volvo.

Nvidia has significantly invested in expanding its influence within the automotive sector to capture the growing demand for its chips, which are integral to the development of autonomous driving capabilities. Kani emphasised the complexity involved in achieving true autonomy, stating, “It’s a next-decade marvel. We’re not close. It’s super-hard.” While there are vehicles on the market with limited autonomous functionalities in specific controlled environments, Kani explained that real self-driving cars necessitate significant advancements in both computing power and technology.

“The software we’re developing right now is so different than the software we were developing last year,” he noted. Kani referenced the implementation of large-language models, akin to ChatGPT but adapted for video, highlighting a major shift in the industry. “That kind of model needs a lot more computing power, a lot more memory bandwidth. You need more sensors like lidar and radar, and you need redundant algorithms to ensure it’s safe – and those need to run in parallel, which means more computing.”

A key aspect of Kani's insights concerned the current generation of driver assistance systems, which rely on advance planning software to execute specific actions in certain scenarios. He pointed out that these systems often lead to abrupt or unsettling driving behaviours, referred to as “herky-jerky behaviour and ghost braking.” Looking forward, Kani believes that the next generation of vehicles will learn and adapt their driving behaviours, resulting in a smoother and more intuitive driving experience, wherein consumers will feel greater confidence, stating, “When you start to say: ‘Whoa, this car is driving so calmly and smoothly.’”

In addition to technical challenges, Kani underscored the importance of cautious development within the self-driving technology sector. He warned that “the industry needs to go slowly with this. If one firm makes one mistake, the whole industry gets pushed back a few years.” This sentiment reflects a broader concern regarding the potential repercussions of rushed advancements in technology. "So we have to act in the most responsible way and not take any shortcuts,” Kani added, reinforcing the necessity of ensuring safety before widespread deployment.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

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