# Nvidia's ambitious vision for the future of AI and robotics unveiled at CES



Jensen Huang, the chief executive of Nvidia, presented a bold vision for the future of artificial intelligence (AI) and robotics at the annual Consumer Electronics Show (CES) held in Las Vegas. During his keynote speech on Monday, Huang outlined ambitious targets, including the production of one billion humanoid robots, 10 million automated factories, and 1.5 billion autonomous vehicles. This vision positions Nvidia as a pivotal player in the AI-powered future.

The significance of Huang's address was underscored by the massive turnout at the Mandalay Bay convention centre, with attendees queuing long before the keynote began. This enthusiasm reflects Nvidia's remarkable advancement in technology, particularly in AI chip production, which has propelled the company to a staggering $3 trillion market capitalisation, marking it as one of the world’s most valuable corporations.

As part of its ongoing innovation, Nvidia announced several major initiatives and partnerships, particularly in the field of “physical AI.” This includes new AI models tailored for humanoid robots and a strategic collaboration with Toyota to integrate Nvidia’s self-driving car technology into the latter's future autonomous vehicle offerings. Huang conveyed confidence in the potential of AI to transform industries, stating, "Cracking the technological challenges involved in deploying robots at scale will pave the way to the largest technology industry the world has ever seen."

The company introduced a range of foundational AI models on its newly launched Cosmos platform, which will be accessible to developers at no charge for data generation and model building. The foundation models were trained on an impressive 20 million hours of video data, a feat that Huang compared to the impact of large language models, like those behind OpenAI’s ChatGPT, on digital communication.

Rev Lebaredian, Nvidia’s vice-president for Omniverse and simulation technology, emphasised the significance of these developments, stating, "What [those models] are doing for language, we can now do for understanding the physical world." He noted the complexity of gathering data on the physical world compared to text but affirmed its necessity for advancing Nvidia’s mission.

In recent fiscal reports, sectors including "professional virtualisation" and "automotive and robotics" contributed relatively modest revenue compared to the robust $30.8 billion from data centre chip sales. Despite this, Nvidia anticipates significant growth in its automotive sector, with expectations for it to reach $6 billion by the fiscal year 2026. Huang referred to autonomous vehicles as “the first multitrillion-dollar robotics industry.”

Further announcements included the introduction of the “GR00T Blueprint,” a collection of foundational models designed to expedite the development of humanoid robots, alongside tools meant for testing and training fleets of robots and self-driving vehicles. Toyota's decision to develop its next generation of autonomous cars using Nvidia’s Drive AGX hardware and software expands the company's automotive influence, further solidified by partnerships with self-driving organisations such as Aurora and automotive parts supplier Continental.

Moreover, Nvidia unveiled a personal AI supercomputer, incorporating its latest AI chip, Blackwell, which researchers and students can acquire for initial pricing around $3,000, allowing for the running of extensive AI models locally.

In addition to its expanding role in robotics and automotive technology, Nvidia’s potential influence is set to extend into gaming. Huang introduced the next generation of GeForce GPUs, including the flagship RTX 5090 and the RTX 5070, aimed at merging cutting-edge gaming graphics with AI capabilities.

As Nvidia forges ahead into these new markets, it faces increasing competition as major clients, including Amazon and Microsoft, start developing their in-house AI data centre chips. Bank of America analysts have noted that Nvidia’s embrace of “physical AI” is a logical next step amidst these evolving market dynamics.

Overall, Nvidia’s strategic initiatives and the vision presented by Huang reflect a significant drive towards integrating AI across diverse industries, which could reshape operations and productivity in substantial ways in the coming years.

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

## References

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* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Details Nvidia's advancements in physical AI, autonomous vehicles, and the DRIVE Hyperion platform.
* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Explains the introduction of AI Blueprints for enterprise workflows and the Isaac GR00T Blueprint for synthetic motion generation.
* <https://www.nvidia.com/en-us/events/ces/> - Provides information on Nvidia's presence at CES 2025, including the keynote by Jensen Huang.
* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Discusses Nvidia's market position and the significance of its $3 trillion market capitalization.
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* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Mentions the unveiling of a personal AI supercomputer with Nvidia's latest AI chip, Blackwell.
* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Discusses the next generation of GeForce GPUs, including the RTX 5090 and RTX 5070, and their AI capabilities.
* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Addresses the increasing competition from major clients developing in-house AI data centre chips.
* <https://aimagazine.com/articles/nvidias-new-ai-innovations-at-ces-2025-explained> - Highlights Nvidia's strategic initiatives and vision for integrating AI across diverse industries.