

# North America AI in Computer Vision Market Forecast to 2030 - Regional Analysis - by Component (Software and Hardware) and End Use Industry (Security and Surveillance, Manufacturing, Automotive, Retail, Sports and Entertainment, and Others)

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## **Abstracts**

The North America AI in computer vision market was valued at US\$ 5,011.48 million in 2022 and is expected to reach US\$ 51,121.71 million by 2030; it is estimated to record a CAGR of 33.7% from 2022 to 2030.

Growing Adoption of Industry 4.0 Fuels North America AI in Computer Vision Market

Industry 4.0 is a new phase of the industrial revolution—the digital transformation of manufacturing and related industries—that highly emphasizes automation, interconnectivity, real-time data, and machine learning. By combining Industry 4.0 with automation systems, traditional industrial facilities are gradually evolving into smart, connected, and highly efficient automated facilities. It forms a single automated unit that combines computers and industrial automation solutions with the help of robotics. A network of connected devices creates a smart architecture capable of making decentralized decisions. The increasing adoption of Al-based computer vision solutions among Industry 4.0 companies is expected to improve warehouse safety, allow companies to achieve higher levels of lean manufacturing, and increase productivity and profitability while lowering long-term costs. Furthermore, Al computer vision is transforming Industry 4.0 by enabling automated vehicles to interpret and understand visual information. Combining artificial intelligence and computer vision is like having a team of superpowered robots working in the warehouse and logistics operations. These robots can analyze, see, and make decisions based on what they observe. This results in a more accurate, efficient, and streamlined workflow, leading to increased profitability



and productivity. In a warehouse and logistics setting, these robots can perform tasks such as quality control, object recognition and identification, picking and packing, and inventory management. They help work at a faster pace and eliminate the possibility of human error, making sure that the right products reach the right customers on time and ensuring the smooth flow of operations. Al computer vision revolutionizes industry processes by reducing human error, automating tasks, increasing productivity, enabling intelligent decision-making based on real-time data, and ensuring product quality. There are several applications of AI computer vision systems in automation for Industry 4.0. With computer vision, it measures products' quantities precisely and quickly, reduces costs and timelines, avoids human contact in particular processing to eliminate contamination risks, and guarantees better safety standards to employees. Al computer vision is fast growing in the industrial world because it offers integrable solutions in the production lines. A computer vision system can perform several operations, including monitoring products, analyzing possible defects, performing predictive maintenance to avoid malfunctions and interruptions, and improving safety on production sites. Thus, with the growing adoption of Industry 4.0, the demand for AI in computer vision is increasing.

## North America AI in Computer Vision Market Overview

The North America AI in computer vision market is growing significantly as governments in this region are taking various initiatives to develop AI-related solutions. For instance, in February 2019, by signing Executive Order 13859, the president of the US launched the American Artificial Intelligence Initiative, the US's national strategy for maintaining American leadership in AI. The American AI Initiative is focused on the resources of the Federal Government in the reinforcement of AI innovation that will increase prosperity, improve quality of life, and enhance national security. In the past years since the signing of the Executive Order, the US has achieved significant progress in achieving the national strategy's objectives. The Initiative emphasizes on the following key policies and practices: invest in AI research and development, unleash AI resources, remove barriers to AI innovation, embrace trustworthy AI for government services and missions, promote an international environment supportive of American AI innovation, and train an AI-ready workforce.

Furthermore, various companies in North America are taking initiatives such as partnerships and product launches. For example, in May 2022, Invisible AI announced a partnership with Toyota Motor North America (TMNA). As per this partnership, TMNA will integrate Invisible AI's innovative computer vision platform across its 14 North American manufacturing operations. The partnership aims to install a ground-breaking



computer vision platform across North America. Similarly, in September 2022, Amazon Web Services (AWS) and SK Telecom announced at the Mobile World Congress (MWC) that the two companies will co-develop a new set of computer vision services in Las Vegas. This collaboration aimed to make it easier and more cost-effective for customers to use, build, and scale computer vision applications, which maintain equipment, improve facility safety, and enhance productivity.

North America AI in Computer Vision Market Revenue and Forecast to 2030 (US\$ Million)

North America AI in Computer Vision Market Segmentation

The North America AI in computer vision market is segmented based on component, end use industry, and country. Based on component, the North America AI in computer vision market is bifurcated into software and hardware. The software segment held a larger market share in 2022.

In terms of end use industry, the North America AI in computer vision market is categorized into security and surveillance, manufacturing, automotive, retail, sports and entertainment, and others. The security and surveillance segment held the largest market share in 2022.

Based on country, the North America AI in computer vision market is segmented into the US, Canada, and Mexico. The US dominated the North America AI in computer vision market share in 2022.

Advanced Micro Devices Inc, Cognex Corp, General Electric Co, Intel Corp, Microsoft Corp, Qualcomm Inc, Teledyne Technologies Inc, NVIDIA Corp, BASLER AG, and International Business Machines Corp are some of the leading players operating in the North America AI in computer vision market.



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