AI in Computer Vision Market by Offering (Cameras, Frame Grabbers, Optics, LED Lighting, CPU, GPU, ASIC, FPGA, AI Vision Software, AI Platform), Technology (Machine Learning, GenAI), Function (Training, Inference), Application - Global Forecast to 2030

Market Report | 2024-12-20 | 280 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User $4950.00
- Multi User $6650.00
- Corporate License $8150.00
- Enterprise Site License $10000.00

Report description:

The global AI in computer vision market is projected to reach USD 63.48 billion in 2030 from USD 23.42 billion in 2025; it is expected to grow at a CAGR of 22.1% from 2025 to 2030. Growth rates in the market for AI in computer vision are accelerating with improvements in machine learning algorithms, increasing computational power, and expansion of high-quality image data. Industries such as health care, retail, manufacturing, and automotive are increasingly applying AI vision solutions to diagnostics, inventory management, quality control, and autonomous vehicles. However, with rising concerns regarding costs associated with implementation or data privacy, demands for increased automation and efficient operation as well as actionable analysis are driving this growth. Edge computing coupled with cloud services and 5G technology increases the adaptability and speed of AI vision solutions, further boosting the market growth.

"Machine learning segment is expected to dominate during the forecast period."
Machine learning is the backbone to the success of AI-enabled computer vision. Modern techniques, such as deep learning and convolutional neural networks, enable AI to recognize patterns, detect objects, and interpret scenes in real-time. Its swift adoption is transforming various industries-from healthcare diagnostics, to quality control in manufacturing, to customer behavior analytics in retail-where no one will be relying on massive workforces. The increasing visual data from smartphones, sensors, and surveillance cameras, further accelerates the market growth in AI in computer vision. New breakthroughs in edge-based machine learning are enabling AI in computer vision to be faster, smarter, and more widely deployable, creating a window of opportunity across various industries.

continue to grow.

"Consumer electronics segment is expected to hold the largest market share in AI in computer vision market."
The market for AI in computer vision in consumer electronics is expected to grow rapidly. This is because more and more AI technology is being integrated into smart devices. These include smartphones, wearables, and home appliances. With such capabilities, advanced applications such as facial recognition, object detection, augmented reality, and automated image processing enhance user experience. The increasing demand for such features as AR for gaming, facial recognition as an access method, and automation for smart homes can be considered as the factors that are responsible for pushing the growth of this market.

The high penetration of smart connected devices and the rapid growth of IoT further support this case in the acceptance of AI-based solutions and technologies in consumer electronics. Computer vision powered with AI gives new ways and insights to improve how devices from smartphones to robotic vacuums engage with end-users-more smartly and intuitively.
Growing investments alongside technological advancements are driving this industry. Phiar Technologies, Scandit, and others are creating augmented reality navigation solutions based on AI-enabled computer vision and simplification of data capture processes. Investors recognize the sustained, ever-expanding potential of consumer electronics, boosting advancements in AI. New opportunities will keep coming up for applying AI in consumer electronics therefore further solidifying its strong hold for the future of connected life.

"North America is projected to hold the second largest market share in the AI in computer vision market."
In the North American region, AI in computer vision market holds a second-largest share because of rapid advancements in technology, a robust innovation ecosystem, and high-scale adoption across industries. Major investments in the US, including AI research institutes and rising collaborations between startups and high-tech companies, have promoted innovation and strengthened the AI infrastructure. Severed companies like Google, Microsoft, and Amazon have influenced the private sector in launching the initiatives to develop AI-based solutions in terms of industries related to healthcare, manufacturing, retail, and others. Within this important aspect, the Canadian government has a focus on responsible AI development and has given a considerable amount of funding for AI infrastructure development and AI research. Mexico is growing its use of AI technologies due to investment in manufacturing automation and cloud infrastructure, which enables small and medium-sized businesses to use AI-powered solutions to improve operational efficiency.
Moreover, strategic partnerships and initiatives like AI integration in Mexico's manufacturing as well as advanced facility construction of AI computing components further develop the region's capabilities. In this way, strong government and private sectors' support for advanced computing resources fuels the AI in computer vision market in North America. Further market growth is facilitated by increased AI infrastructure adoption across industries as well as improvement in AI technologies.

-□By Company Type: Tier 1 - 45%, Tier 2 - 30%, and Tier 3 - 25%
-□By Designation: C-level Executives - 30%, Directors - 32%, and Others - 38%
-□By Region: North America- 32%, Europe - 20%, Asia Pacific- 43% and RoW- 5%

NVIDIA Corporation (US), Microsoft Corporation (US), Intel Corporation (US), Alphabet Inc. (US), Amazon.com, Inc. (US), Cognex Corporation (US), Qualcomm Technologies, Inc. (US), Sony Group Corporation (Japan), OMRON Corporation (Japan), KEYENCE CORPORATION (Japan), SICK AG (Germany), Teledyne Technologies (US), Texas Instruments Incorporated (US), Basler AG (Germany), Hailo Technologies Ltd. (Israel). are some of the key players in the AI in computer vision market.

The study includes an in-depth competitive analysis of these key players in the AI in computer vision market, as well as their company profiles, recent developments, and key market strategies.

Research Coverage

This research report categorizes the AI in computer vision market by various machine learning models (Supervised Learning, Unsupervised Learning, Reinforcement Learning), by use case (Object Detection, Image Recognition, Facial Recognition, Motion Analysis, and Machine Vision), by offering (Cameras, Frame Grabbers, Optics, LED Lighting, Processors, AI Vision Software, and AI Platforms), by technology (Machine Learning (Deep Learning, and Convolutional Neural Networks), and Generative AI), by function (Training, and Inference), by application (Quality Assurance & Inspection, Measurement, Identification, Predictive Maintenance, Positioning & Guidance), by end-user (Automotive, Consumer Electronics, Healthcare, retail, Security & Surveillance, Manufacturing, Agriculture, Transportation & Logistics, and Others), and by region (North America, Europe, Asia Pacific, and RoW). The report's scope covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the AI in computer vision market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; new product & service launches, mergers and acquisitions; and recent developments associated with the AI in computer vision market. This report covers the competitive analysis of upcoming startups in the AI in computer vision market ecosystem.

Reasons to buy this report

The report will help market leaders and new entrants with information on the closest approximations of the revenue numbers for the overall AI in computer vision market and its subsegments. It will also help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:
-□Analysis of key drivers (Advancements in hardware such as GPUs, TPUs, and edge devices, Growing role of cloud computing in enhancing computer vision capabilities, Increasing adoption of edge computing), restraints (Data privacy and security concerns), opportunities (Rapid innovations in healthcare, Automation in manufacturing and industry 4.0), and challenges (High data storage and management costs, Integrating AI within existing systems) influencing the growth of the AI in computer vision market
-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the AI in computer vision market
-□Market Development: The report provides comprehensive information about lucrative markets and analyses the AI in computer vision market across varied regions.
-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the AI in computer vision market
-□Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players in the AI in computer vision market, such as NVIDIA Corporation (US), Microsoft Corporation (US), Intel Corporation (US), Alphabet Inc. (US), Amazon.com, Inc. (US), Cognex Corporation (US), Qualcomm Technologies, Inc. (US), Sony Group Corporation (Japan), OMRON Corporation (Japan), KEYENCE CORPORATION (Japan), SICK AG (Germany), Teledyne Technologies (US), Texas Instruments Incorporated (US), Basler AG (Germany), and Hailo Technologies Ltd. (Israel), among others in the AI in computer vision market.

Table of Contents:

?

AI in Computer Vision Market by Offering (Cameras, Frame Grabbers, Optics, LED Lighting, CPU, GPU, ASIC, FPGA, AI Vision Software, AI Platform), Technology (Machine Learning, GenAI), Function (Training, Inference), Application - Global Forecast to 2030

Market Report | 2024-12-20 | 280 pages | MarketsandMarkets

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	$4950.00
	Multi User	$6650.00
	Corporate License	$8150.00
	Enterprise Site License	$10000.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	

Zip Code*		Country*	
		Date	2025-05-20
		Signature	