AI In Automotive Market is projected to achieve a CAGR of 22.69% to reach US$52.981 billion by 2028

The AI in automotive market is anticipated to grow at a CAGR of 22.69% from US$12.66 billion in 2021 to US$52.981 billion by 2028.

NOIDA, UTTAR PARDESH, INDIA, December 13, 2023 /EINPresswire.com/ -- According to a new study published by Knowledge Sourcing Intelligence, the AI in automotive market is projected to grow at a CAGR of 22.69%, between 2023 and 2028 to reach US$52.981 billion by 2028.

The expanding public knowledge of the benefits of self-driving technology has increased

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> *Knowledge Sourcing Intelligence*

demand for self-driving cars. The big automakers see AI technology as an essential tool for creating and constructing self-driving vehicles. Furthermore, various governments and manufacturers throughout the world have launched numerous strategic efforts to stimulate innovation in the autonomous car field. Moreover, advanced driver assistance system (ADAS) level 2 technology is gaining popularity. The growing need for ADAS systems that assist human drivers in making smart driving decisions is encouraging the use of AI in the

automotive sector. The rising need for AI in the automotive sector is creating several possibilities for industry players and startups, which will benefit them in the long term.

AI technology is widely employed in the automotive industry, from autonomous cars, taxis, trucks, and buses to industrial robots in manufacturing plants. As a result, AI has lately resulted in substantial breakthroughs in the automobile sector. Artificial intelligence is also changing the support jobs in research, design, and manufacturing. As manufacturers become more aware of the significance of AI applications, they are focusing on developing cutting-edge AI solutions to fulfil the need for autonomous cars. Artificial intelligence in automobiles can aid drivers in avoiding collisions. Autonomous or driverless vehicles are one of the most effective applications of AI in the automotive industry. The application of artificial intelligence to the creation of self-learning, self-driving automobiles in the automotive sector has pushed the expansion of the AI

automotive market. Autonomous or connected cars require an increasing quantity of data to perform autonomously. Using AI cloud services is useful in this circumstance since it ensures data accessibility when self-driving cars are required. Further, AI robots are being used on a growing number of industrial lines. In the automobile manufacturing process, industrial robots are presently more productive than human labour. Because of the improved technologies included by artificial intelligence, robots can also complete comparable tasks which is aiding in the market development.

The market is witnessing multiple collaborations and technological advancements, for instance, Qualcomm Inc. purchased Autotalks, Ltd., a semiconductor firm, in May 2023. The acquisition sought to broaden Qualcomm Inc.'s snapdragon digital chassis product line, which includes the company's portfolio of cloud-connected car platforms.

Access sample report or view details: https://www.knowledge-sourcing.com/report/ai-automotive-market

Based on application the global AI in the automotive market is divided into autonomous vehicles, emotion detection and risk identification, testing, manufacturing, and others. Autonomous cars are one of the most popular and widely used AI applications in the automotive industry. The use of artificial intelligence (AI) in autonomous driving technology allows cars to observe their environment, make real-time judgments, and navigate without the need for human interaction. This application has piqued the interest of many people owing to its potential to improve road safety, boost efficiency, and revolutionize the future of transportation. The prospect of lowering accidents, improving traffic flow, and offering a more convenient and pleasurable driving experience drives demand for autonomous cars.

Based on offering the global AI in the automotive market is divided into hardware and software and services. Among these, the hardware segment is anticipated to grow significantly over the forecast period. Automotive AI hardware is regarded as a critical component of current automobiles since it offers increased features and capabilities. Sensors like as cameras, radar, ultrasonic sensors, and Inertial Measurement Units (IMUs) are used in automotive AI to collect data on the vehicle's surroundings and internal status. These sensors give critical inputs for AI systems to make intelligent judgments. It also includes processing units such as CPUs (Central Processing Units), GPUs (Graphics Processing Units), and specialized AI chips that perform complex computations required for AI algorithms, as well as actuators that transform electrical impulses into physical actions, enabling AI-controlled tasks.

Based on technology the global AI in the automotive market is divided into computer vision, context awareness, deep learning, machine learning, and natural language processing. Among these, the machine learning segment is anticipated to grow significantly over the forecast period. Machine learning has played a significant part in recent developments in the automobile sector, such as self-driving cars, lane-change assistance, park assistance, and intelligent energy systems. Drivers can receive car maintenance advice from machine learning systems. They can foresee

when an incident or issue will occur again by using references from prior occurrences, so improving vehicle safety, efficacy, and performance. As a result, machine learning algorithms are frequently integrated into advanced driver assistance systems (ADAS) to warn drivers of possible road dangers, as well as scheduling and routing systems to save fuel usage. Machine learning may also assist in detecting automotive problems before they become serious, lowering maintenance costs and avoiding major downtime.

Based on Geography the Asia Pacific is expected to have significant market prospects in the next years. The rapid development of the region can be ascribed to rising sales of luxury passenger vehicles, rising disposable income, and good consumer perception of AI. Consumers seeking improved driving experiences have been drawn to the region's increased sales of luxury passenger autos equipped with sophisticated AI technologies. Consumers' increased disposable money to purchase technologically sophisticated automobiles is boosting demand for AI-driven automotive solutions. Furthermore, good customer impressions of AI in the automobile sector, which delivers convenience, safety, and tailored experiences, have fueled market development. Furthermore, government assistance, technological advancements, and commercial alliances have all contributed to the Asia Pacific region's fast-increasing automotive AI sector.

As a part of the report, the major players operating in the global AI in automotive market, that have been covered are Motional, Inc., Waymo LLC, Zoox Inc., AutoX, Inc., Microsoft Corporation, CARVI Co., Ltd., Tesla, SapientX Inc, Nauto, Intel.

The market analytics report segments the AI in automotive market using the following criteria:

• BY APPLICATION

o Autonomous Vehicles

• Fully Automated
• Conditional Automated

o Emotion Detection and Risk Identification
o Testing
o Manufacturing
o Others

• BY OFFERING

o Hardware
o Software and Services

• BY TECHNOLOGY

o Computer Vision
o Context Awareness
o Deep Learning
o Machine Learning
o Natural Language Processing

- BY GEOGRAPHY

o North America

- United States
- Canada
- Mexico

o South America

- Brazil
- Argentina
- Others

o Europe

- Germany
- France
- United Kingdom
- Spain
- Others

o Middle East and Africa

- Saudi Arabia
- UAE
- Israel
- Others

o Asia Pacific

- China
- Japan
- South Korea
- India
- Indonesia
- Taiwan

- Others

Companies Profiled:

- Motional, Inc.
- Waymo LLC
- Zoox Inc.
- AutoX, Inc.
- Microsoft Corporation
- CARVI Co., Ltd.
- Tesla
- SapientX Inc
- Nauto
- Intel

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