

Automotive Artificial Intelligence Market By Component (Hardware, Software, Services), By Technology (Machine Learning and Deep Learning, Computer Vision, Natural Language Processing, Others), By Application (Semi-Autonomous, Autonomous): Global Opportunity Analysis and Industry Forecast, 2023-2032

<https://marketpublishers.com/r/AA074BDC48EAEN.html>

Date: April 2024

Pages: 233

Price: US\$ 3,570.00 (Single User License)

ID: AA074BDC48EAEN

Abstracts

The global automotive artificial intelligence market size was valued at \$13.8 billion in 2022, and is projected to reach \$405.3 billion by 2032, growing at a CAGR of 40.7% from 2023 to 2032.

Automotive artificial intelligence refers to the use of AI technology in automobiles to increase various aspects of the automobile system, including efficiency, safety, convenience, and to improve the overall driving experience. The automotive industry has witnessed the advent of artificial intelligence and is among the major industries that uses AI to augment and mimic the action of humans. Furthermore, emergence of modern automobile functions such as advanced driver assistance system (ADAS), adaptive cruise control (ACC), blind spot alert, autonomous driving, predictive maintenance, intelligent traffic management, and surge in demand for convenient features attract automotive manufacturers toward AI.

The automotive artificial intelligence market growth is driven by surge in demand for autonomous vehicles, growth in high-speed internet & 5G technology, and rise in demand for enhanced user experience & convenience features. However, factors such

as a rise in security and privacy concerns and a stringent regulatory landscape are anticipated to hinder the market growth rate. Furthermore, the increase in demand for premium vehicles and growth in connected vehicle technology are forecasted to provide lucrative growth market growth opportunities.

In recent years, autonomous vehicles have gained popularity due to various additional features it offers such as self-driving, automatic parking, and a variety of other features. Autonomous vehicles minimize human efforts and make driving safer and more convenient. Moreover, major global companies such as Nvidia Corporation, Intel Corporation, and Tesla, Inc., have invested heavily in R&D for the development of the technology.

For instance, the Tesla, Inc. autopilot system has features such as keeping the vehicle within a lane while driving, automatically changing the lanes whenever required, and self-parking, which is one of the most advanced systems available in the market currently. Moreover, autonomous vehicles are anticipated to reduce human intervention and are of vital importance in industries that have a shortage of manpower, especially in the transportation and logistics sector. This, in turn, is expected to drive the growth of the automotive artificial intelligence market.

Autonomous vehicles have made vehicle driving for consumers safe and convenient. However, there are certain threats that are faced by the manufacturers that are related to security and privacy concerns such as safety of personal data, cyber-attacks, and data breaches.

For instance, on May 12, 2023, Toyota Motor Corporation announced that due to a human error, the vehicle data of 2.15 million customers in Japan, or approximately the entire customer base that signed up for its primary cloud service platforms since 2012, had been publicly available. The data included vehicle location as well as identification numbers of vehicle devices. These types of instances of intruding on a customer's privacy are some of the major restraints in the market.

Furthermore, the demand for premium luxury vehicles is driven by a rise in global standards of living and increase in disposable income among people. It is evident that the premium automobile market has seen an increase in sales recently, and as the majority of premium cars on the road now are equipped with artificial intelligence technology, there is an enormous amount of opportunity for expansion in artificial intelligence in the automotive market. The largest manufacturers of luxury automobiles include General Motors, BMW, Honda Motor Co., Ltd., Tesla, Inc., and others are

continuously focusing on development of the technology to enhance AI features in their products.

The automotive artificial intelligence market is segmented on the basis of component, technology, application, and region. On the basis of component, the market is divided into hardware, software, and services. On the basis of technology, the market is classified into machine learning & deep learning, computer vision, natural language processing, and others. By application, the global market is segregated into semi-autonomous and autonomous. On the basis of the region, the market has been analyzed across North America, Europe, Asia-Pacific, and Latin America and Middle East and Africa.

The key companies profiled in the report include Nvidia Corporation, Alphabet Inc., Intel Corporation, IBM, Microsoft Corporation, BMW AG, Uber Technologies, Inc., Tesla, Inc., Toyota Motor Corporation, AB Volvo

Key Benefits For Stakeholders

This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the automotive artificial intelligence market analysis from 2022 to 2032 to identify the prevailing automotive artificial intelligence market opportunities.

The market research is offered along with information related to key drivers, restraints, and opportunities.

Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.

In-depth analysis of the automotive artificial intelligence market segmentation assists to determine the prevailing market opportunities.

Major countries in each region are mapped according to their revenue contribution to the global market.

Market player positioning facilitates benchmarking and provides a clear

understanding of the present position of the market players.

The report includes the analysis of the regional as well as global automotive artificial intelligence market trends, key players, market segments, application areas, and market growth strategies.

Additional benefits you will get with this purchase are:

Quarterly Update and* (only available with a corporate license, on listed price)

5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.

Free Upcoming Version on the Purchase of Five and Enterprise User License.

16 analyst hours of support* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)

15% Free Customization* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)

Free data Pack on the Five and Enterprise User License. (Excel version of the report)

Free Updated report if the report is 6-12 months old or older.

24-hour priority response*

Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

Upcoming/New Entrant by Regions

Global Market Strategy

Additional company profiles with specific client's interest

Additional country or region analysis- market size and forecast

SWOT Analysis

Key Market Segments

By Component

Hardware

Software

Services

By Technology

Machine Learning and Deep Learning

Computer Vision

Natural Language Processing

Others

By Application

Semi-Autonomous

Autonomous

By Region

North America

U.S.

Canada

Mexico

Europe

Germany

France

UK

Spain

Rest of Europe

Asia-Pacific

China

India

Japan

South Korea

Rest of Asia-Pacific

Latin America

Brazil

Argentina

Rest of Latin America

Middle East and Africa

GCC Countries

South Africa

Rest of Middle East And Africa

Key Market Players

Uber Technologies, Inc

Tesla, Inc.

Toyota Motor Corporation

Nvidia Corporation

Alphabet Inc

Intel Corporation

IBM

Microsoft Corporation

BMW AG

AB Volvo

Contents

CHAPTER 1: INTRODUCTION

- 1.1. Report Description
- 1.2. Key market segments
- 1.3. Key benefits to the stakeholders
- 1.4. Research Methodology
 - 1.4.1. Primary research
 - 1.4.2. Secondary research
 - 1.4.3. Analyst tools and models

CHAPTER 2: EXECUTIVE SUMMARY

- 2.1. CXO perspective

CHAPTER 3: MARKET OVERVIEW

- 3.1. Market definition and scope
- 3.2. Key findings
 - 3.2.1. Top impacting factors
 - 3.2.2. Top investment pockets
- 3.3. Porter's Five Forces Analysis
- 3.4. Market dynamics
 - 3.4.1. Drivers
 - 3.4.2. Restraints
 - 3.4.3. Opportunities

CHAPTER 4: AUTOMOTIVE ARTIFICIAL INTELLIGENCE MARKET, BY COMPONENT

- 4.1. Overview
 - 4.1.1. Market size and forecast
- 4.2. Hardware
 - 4.2.1. Key market trends, growth factors and opportunities
 - 4.2.2. Market size and forecast, by region
 - 4.2.3. Market share analysis by country
- 4.3. Software
 - 4.3.1. Key market trends, growth factors and opportunities

- 4.3.2. Market size and forecast, by region
- 4.3.3. Market share analysis by country
- 4.4. Services
 - 4.4.1. Key market trends, growth factors and opportunities
 - 4.4.2. Market size and forecast, by region
 - 4.4.3. Market share analysis by country

CHAPTER 5: AUTOMOTIVE ARTIFICIAL INTELLIGENCE MARKET, BY TECHNOLOGY

- 5.1. Overview
 - 5.1.1. Market size and forecast
- 5.2. Machine Learning and Deep Learning
 - 5.2.1. Key market trends, growth factors and opportunities
 - 5.2.2. Market size and forecast, by region
 - 5.2.3. Market share analysis by country
- 5.3. Computer Vision
 - 5.3.1. Key market trends, growth factors and opportunities
 - 5.3.2. Market size and forecast, by region
 - 5.3.3. Market share analysis by country
- 5.4. Natural Language Processing
 - 5.4.1. Key market trends, growth factors and opportunities
 - 5.4.2. Market size and forecast, by region
 - 5.4.3. Market share analysis by country
- 5.5. Others
 - 5.5.1. Key market trends, growth factors and opportunities
 - 5.5.2. Market size and forecast, by region
 - 5.5.3. Market share analysis by country

CHAPTER 6: AUTOMOTIVE ARTIFICIAL INTELLIGENCE MARKET, BY APPLICATION

- 6.1. Overview
 - 6.1.1. Market size and forecast
- 6.2. Semi-Autonomous
 - 6.2.1. Key market trends, growth factors and opportunities
 - 6.2.2. Market size and forecast, by region
 - 6.2.3. Market share analysis by country
- 6.3. Autonomous

- 6.3.1. Key market trends, growth factors and opportunities
- 6.3.2. Market size and forecast, by region
- 6.3.3. Market share analysis by country

CHAPTER 7: AUTOMOTIVE ARTIFICIAL INTELLIGENCE MARKET, BY REGION

7.1. Overview

- 7.1.1. Market size and forecast By Region

7.2. North America

- 7.2.1. Key market trends, growth factors and opportunities
- 7.2.2. Market size and forecast, by Component
- 7.2.3. Market size and forecast, by Technology
- 7.2.4. Market size and forecast, by Application
- 7.2.5. Market size and forecast, by country
 - 7.2.5.1. U.S.
 - 7.2.5.1.1. Market size and forecast, by Component
 - 7.2.5.1.2. Market size and forecast, by Technology
 - 7.2.5.1.3. Market size and forecast, by Application
 - 7.2.5.2. Canada
 - 7.2.5.2.1. Market size and forecast, by Component
 - 7.2.5.2.2. Market size and forecast, by Technology
 - 7.2.5.2.3. Market size and forecast, by Application
 - 7.2.5.3. Mexico
 - 7.2.5.3.1. Market size and forecast, by Component
 - 7.2.5.3.2. Market size and forecast, by Technology
 - 7.2.5.3.3. Market size and forecast, by Application

7.3. Europe

- 7.3.1. Key market trends, growth factors and opportunities
- 7.3.2. Market size and forecast, by Component
- 7.3.3. Market size and forecast, by Technology
- 7.3.4. Market size and forecast, by Application
- 7.3.5. Market size and forecast, by country
 - 7.3.5.1. Germany
 - 7.3.5.1.1. Market size and forecast, by Component
 - 7.3.5.1.2. Market size and forecast, by Technology
 - 7.3.5.1.3. Market size and forecast, by Application
 - 7.3.5.2. France
 - 7.3.5.2.1. Market size and forecast, by Component
 - 7.3.5.2.2. Market size and forecast, by Technology

7.3.5.2.3. Market size and forecast, by Application

7.3.5.3. UK

7.3.5.3.1. Market size and forecast, by Component

7.3.5.3.2. Market size and forecast, by Technology

7.3.5.3.3. Market size and forecast, by Application

7.3.5.4. Spain

7.3.5.4.1. Market size and forecast, by Component

7.3.5.4.2. Market size and forecast, by Technology

7.3.5.4.3. Market size and forecast, by Application

7.3.5.5. Rest of Europe

7.3.5.5.1. Market size and forecast, by Component

7.3.5.5.2. Market size and forecast, by Technology

7.3.5.5.3. Market size and forecast, by Application

7.4. Asia-Pacific

7.4.1. Key market trends, growth factors and opportunities

7.4.2. Market size and forecast, by Component

7.4.3. Market size and forecast, by Technology

7.4.4. Market size and forecast, by Application

7.4.5. Market size and forecast, by country

7.4.5.1. China

7.4.5.1.1. Market size and forecast, by Component

7.4.5.1.2. Market size and forecast, by Technology

7.4.5.1.3. Market size and forecast, by Application

7.4.5.2. India

7.4.5.2.1. Market size and forecast, by Component

7.4.5.2.2. Market size and forecast, by Technology

7.4.5.2.3. Market size and forecast, by Application

7.4.5.3. Japan

7.4.5.3.1. Market size and forecast, by Component

7.4.5.3.2. Market size and forecast, by Technology

7.4.5.3.3. Market size and forecast, by Application

7.4.5.4. South Korea

7.4.5.4.1. Market size and forecast, by Component

7.4.5.4.2. Market size and forecast, by Technology

7.4.5.4.3. Market size and forecast, by Application

7.4.5.5. Rest of Asia-Pacific

7.4.5.5.1. Market size and forecast, by Component

7.4.5.5.2. Market size and forecast, by Technology

7.4.5.5.3. Market size and forecast, by Application

7.5. Latin America

7.5.1. Key market trends, growth factors and opportunities

7.5.2. Market size and forecast, by Component

7.5.3. Market size and forecast, by Technology

7.5.4. Market size and forecast, by Application

7.5.5. Market size and forecast, by country

7.5.5.1. Brazil

7.5.5.1.1. Market size and forecast, by Component

7.5.5.1.2. Market size and forecast, by Technology

7.5.5.1.3. Market size and forecast, by Application

7.5.5.2. Argentina

7.5.5.2.1. Market size and forecast, by Component

7.5.5.2.2. Market size and forecast, by Technology

7.5.5.2.3. Market size and forecast, by Application

7.5.5.3. Rest of Latin America

7.5.5.3.1. Market size and forecast, by Component

7.5.5.3.2. Market size and forecast, by Technology

7.5.5.3.3. Market size and forecast, by Application

7.6. Middle East and Africa

7.6.1. Key market trends, growth factors and opportunities

7.6.2. Market size and forecast, by Component

7.6.3. Market size and forecast, by Technology

7.6.4. Market size and forecast, by Application

7.6.5. Market size and forecast, by country

7.6.5.1. GCC Countries

7.6.5.1.1. Market size and forecast, by Component

7.6.5.1.2. Market size and forecast, by Technology

7.6.5.1.3. Market size and forecast, by Application

7.6.5.2. South Africa

7.6.5.2.1. Market size and forecast, by Component

7.6.5.2.2. Market size and forecast, by Technology

7.6.5.2.3. Market size and forecast, by Application

7.6.5.3. Rest of Middle East And Africa

7.6.5.3.1. Market size and forecast, by Component

7.6.5.3.2. Market size and forecast, by Technology

7.6.5.3.3. Market size and forecast, by Application

CHAPTER 8: COMPETITIVE LANDSCAPE

- 8.1. Introduction
- 8.2. Top winning strategies
- 8.3. Product mapping of top 10 player
- 8.4. Competitive dashboard
- 8.5. Competitive heatmap
- 8.6. Top player positioning, 2022

CHAPTER 9: COMPANY PROFILES

- 9.1. Nvidia Corporation
 - 9.1.1. Company overview
 - 9.1.2. Key executives
 - 9.1.3. Company snapshot
 - 9.1.4. Operating business segments
 - 9.1.5. Product portfolio
 - 9.1.6. Business performance
 - 9.1.7. Key strategic moves and developments
- 9.2. Alphabet Inc
 - 9.2.1. Company overview
 - 9.2.2. Key executives
 - 9.2.3. Company snapshot
 - 9.2.4. Operating business segments
 - 9.2.5. Product portfolio
 - 9.2.6. Business performance
 - 9.2.7. Key strategic moves and developments
- 9.3. Intel Corporation
 - 9.3.1. Company overview
 - 9.3.2. Key executives
 - 9.3.3. Company snapshot
 - 9.3.4. Operating business segments
 - 9.3.5. Product portfolio
 - 9.3.6. Business performance
 - 9.3.7. Key strategic moves and developments
- 9.4. IBM
 - 9.4.1. Company overview
 - 9.4.2. Key executives
 - 9.4.3. Company snapshot
 - 9.4.4. Operating business segments
 - 9.4.5. Product portfolio

- 9.4.6. Business performance
- 9.4.7. Key strategic moves and developments
- 9.5. Microsoft Corporation
 - 9.5.1. Company overview
 - 9.5.2. Key executives
 - 9.5.3. Company snapshot
 - 9.5.4. Operating business segments
 - 9.5.5. Product portfolio
 - 9.5.6. Business performance
 - 9.5.7. Key strategic moves and developments
- 9.6. BMW AG
 - 9.6.1. Company overview
 - 9.6.2. Key executives
 - 9.6.3. Company snapshot
 - 9.6.4. Operating business segments
 - 9.6.5. Product portfolio
 - 9.6.6. Business performance
 - 9.6.7. Key strategic moves and developments
- 9.7. Uber Technologies, Inc
 - 9.7.1. Company overview
 - 9.7.2. Key executives
 - 9.7.3. Company snapshot
 - 9.7.4. Operating business segments
 - 9.7.5. Product portfolio
 - 9.7.6. Business performance
 - 9.7.7. Key strategic moves and developments
- 9.8. Tesla, Inc.
 - 9.8.1. Company overview
 - 9.8.2. Key executives
 - 9.8.3. Company snapshot
 - 9.8.4. Operating business segments
 - 9.8.5. Product portfolio
 - 9.8.6. Business performance
 - 9.8.7. Key strategic moves and developments
- 9.9. Toyota Motor Corporation
 - 9.9.1. Company overview
 - 9.9.2. Key executives
 - 9.9.3. Company snapshot
 - 9.9.4. Operating business segments

9.9.5. Product portfolio

9.9.6. Business performance

9.9.7. Key strategic moves and developments

9.10. AB Volvo

9.10.1. Company overview

9.10.2. Key executives

9.10.3. Company snapshot

9.10.4. Operating business segments

9.10.5. Product portfolio

9.10.6. Business performance

9.10.7. Key strategic moves and developments

I would like to order

Product name: Automotive Artificial Intelligence Market By Component (Hardware, Software, Services), By Technology (Machine Learning and Deep Learning, Computer Vision, Natural Language Processing, Others), By Application (Semi-Autonomous, Autonomous): Global Opportunity Analysis and Industry Forecast, 2023-2032

Product link: <https://marketpublishers.com/r/AA074BDC48EAEN.html>

Price: US\$ 3,570.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/AA074BDC48EAEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970