

Autonomous Vehicle Simulation Solutions Market - A Global Market and Regional Analysis: Focus on Product and Application, Supply Chain, and Country-Level Analysis - Analysis and Forecast, 2020-2031

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Abstracts

Market Report Coverage - Autonomous Vehicle Simulation Solutions

Market Segmentation

Product - Software and Services

Deployment - On-Premises and Cloud

Application Type - Automotive OEMs and Autonomous Driving Technology Development Companies, Tier-1 and Tier-2 Component Manufacturers, University and Research Center, Technology Companies, and Regulatory Bodies

Level of Autonomy - Level 2, Level 3, Level 4 and 5

Regional Segmentation

China

North America - U.S., Canada, and Mexico

South America

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Europe - Germany, France, Spain, and Rest-of-Europe

U.K.

Middle East and Africa

Asia-Pacific and Japan - Japan, South Korea, and Rest-of-Asia-Pacific and Japan

Market Growth Drivers

Need for Virtual Testing of Autonomous Vehicles

Increasing Government Initiatives Toward Connected and Autonomous Infrastructure

Increasing Demand for Reliable Transportation System for Road Safety

Reduction in Research, Development, Production, and Training Costs

Growing Interest Toward Cloud-Based Solutions

Market Challenges

Safety and Reliability Issues with Autonomous Vehicles

Rise in Cyber Threat Due to Increase in Data

Complexity in Integration of New Software Solution With the Existing System

Market Opportunities

Paradigm Shift from Private Car Ownership to Shared Mobility

Increasing Focus on Vehicle Platooning



Use of Simulation in Fourth Industrial Revolution

Key Companies Profiled

Altair Engineering, Inc., Ansys, Inc., Applied Intuition, Inc., Autodesk Inc., AVL List GmbH, Cognata, Dassault Syst?mes, dSPACE GmbH, Foretellix, VIRES Simulationstechnologie GmbH, LG Electronics, Nvidia Corporation, rFpro, The MathWorks, Inc., SAP SE, aiMotive

How This Report Can Add Value

This extensive report can help with:

A dedicated section focusing on the futuristic trends adopted by the key players operating in the global autonomous vehicle simulation solutions market

Extensive competitive benchmarking of top 15 players offering a holistic view of the global autonomous vehicle simulation solutions market landscape

Qualitative and quantitative analysis of autonomous vehicle simulation solutions market at the region and country-level and granularity based on application and product segments

Recent Developments in Autonomous Vehicle Simulation Solutions Market

In January 2021, Ansys, Inc released HFSS Mesh Fusion. HFSS Mesh Fusion accelerates the development of cutting-edge products by allowing for quick and completely linked modeling of complicated EM systems without compromising design or accuracy.

In June 2021, LeddarTech and Cognata, Ltd. announced that Cognata's simulation authoring software had been integrated with LeddarTech's sensor fusion and perception technology, LeddarVision, to speed up testing and validation of self-driving agriculture vehicles.



Key Questions Answered in the Report

What are the underlying structures resulting in the emerging trends within the autonomous vehicle simulation solutions market?

How is the autonomous vehicle simulation solutions market impacted by the introduction of autonomous and connected vehicles?

How are emerging technologies such as artificial intelligence (AI), 5G communication, and the Internet of Things (IoT) driving the growth of the autonomous vehicle simulation solutions market?

Which are the major patents filled in the autonomous vehicle simulation solutions space?

What is the role of governments in various regions regarding the environmental issues and regulatory measures that contribute toward changing the landscape of the Autonomous Vehicle Simulation Solutions market?

What are the key developmental strategies implemented by the prominent players to sustain the competitive market?

What has been the impact of COVID-19 on the Autonomous Vehicle Simulation Solutions market?

Autonomous Vehicle Simulation Solutions

Autonomous vehicle simulation solutions help to build different driving scenarios inside virtual scenes with respect to sensor settings, vehicle actions, traffic, pedestrians, and infrastructure. Automotive OEMs and other stakeholders can use simulation software in autonomous vehicles to simulate many sensors such as lidar, radar, camera, global positioning system (GPS), inertial measurement units (IMU), vehicle-to-vehicle (V2V), and HD maps.

Global Autonomous Vehicle Simulation Solutions Industry Overview

The global autonomous vehicle simulation solutions market is expected to reach \$2,971.4 million by 2031, with a CAGR of 13.4% during the forecast period 2022-2031.



According to studies, the autonomous vehicle simulation solutions industry is driven by several factors such as growing emphasis on road safety, favorable government policies to develop infrastructure for autonomous vehicles, and increasing road congestion.

Market Segmentation

Autonomous Vehicle Simulation Solutions Market by Region

North America dominated the autonomous vehicle simulation solutions market in 2021 and is anticipated to uphold its dominance throughout the forecast period 2022-2031. The autonomous vehicle industry in North America is majorly driven by the growing demand for advanced safety features such as adaptive cruise control, traffic jam assist, and autopilot. Additionally, the increasing number of high-end passenger cars is expected to boost the market growth, as North America is home to numerous leading high-end passenger car manufacturers providing vehicles that are equipped with level 1 and level 2 of autonomy.

Key Market Players and Competition Synopsis

Some key players operating in the market are Altair Engineering, Inc., Ansys, Inc., Applied Intuition, Inc., Autodesk Inc., AVL List GmbH, Cognata, Dassault Syst?mes, dSPACE GmbH, Foretellix, VIRES Simulationstechnologie GmbH, LG Electronics, Nvidia Corporation, rFpro, The MathWorks, Inc., SAP SE, and aiMotive.

The companies profiled in the report have been selected post undergoing in-depth interviews with experts and understanding details around companies such as product portfolios, annual revenues, market penetration, research and development initiatives, and domestic and international presence in the autonomous vehicle simulation solutions market.

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