Deep Learning Market Research Report – Forecast to 2023

Description:

Global Deep Learning Market Research Report: by Component (Hardware, Software, Services), Application (Image Recognition, Data Mining, Signal Recognition), End User (Security, Manufacturing, BFSI, Healthcare, Agriculture) and Region - Forecast till 2023

Market Snapshot

The global deep learning market is expected to expand at 30.87% CAGR during the forecast period.

Global deep learning market is expected to witness substantial growth during the forecast period. North America is estimated to be a prominent region for deep learning market due to the presence of key market players, heavily investing in the research and development of deep learning software, platforms, applications, and systems across the US, Canada, and Mexico. Similarly, increasing demand for deep learning technology for natural language processing and voice/speech recognition in the European financial service industry is projected to drive the deep learning market in the coming years. Asia-Pacific held the second largest market share in deep learning in 2017. In November 2017, Google developed its collaboration tool named Colaboratory, that can run code and show output within the document. It is based on Jupyter (an open source platform for software development using python) and allows the users to share and use notebooks with another user without installing it on the computer.

Global Deep Learning Market, By Region, 2017

Source: - MRFR analysis

Increasing adoption of cloud-based services and large scale generation of unstructured data has increased the demand for deep learning solutions. Additionally, increasing applications of deep learning in recent years for image/speech recognition, data mining and language translations, and
the growing number of humanoid robots, for example, Sophia, developed by Hanson Robotics, are some of the major drivers of the deep learning market. Growing investments for developing machine learning and deep learning applications in the region by key market players is expected to accelerate the market growth in North America.

Presence of key market players and emerging enterprises offering artificial intelligence and deep learning solutions in the country boost the market growth in the US.

Countries such as India, China, and Japan are expected to contribute to the growth of deep learning applications as these countries are witnessing rising number of start-ups focused on offering AI (Artificial Intelligence), ML (Machine Learning), and DL (Deep learning) solutions such as multilingual chatbots for online shopping to enhance customer experience. The growing development and reach of deep learning technology across China, Japan, India, Australia, New Zealand, South Korea, and Taiwan is expected to drive the market growth in Asia-Pacific. Rapid growth in the number of chatbots and investments by companies such as Amazon Web Services Inc., to encourage the adoption of digital voice assistants in this region is also responsible for the market growth in Asia-Pacific. Presence of key market players such as Samsung Group and Baidu Inc. focused on the development of deep learning technology also stimulates the market growth in Asia-Pacific.

Synopsis
Deep learning market has been segmented on the basis of component, application, end user, and region. Based on component, the market has been classified into hardware (processors, memory, and network), software (solution and platform) and services (installation, training, and support & maintenance). The hardware segment is expected to dominate the deep learning market during the forecast period.

Regional Analysis
Deep learning market by region has been segmented into Asia-Pacific, North America, Europe, and the rest of the world (RoW). Within North America region, the growing adoption of deep learning technology for applications namely voice and image recognition, data mining, signal recognition and diagnostics purpose in the US, Canada, and Mexico is driving the market growth. The growing development and penetration of deep learning technology in China, Japan, India, Australia, New Zealand, South Korea, and Taiwan rapidly drives the market growth Asia-Pacific region. Additionally, the adoption of deep learning technology by governments in the European countries for surveillance, fraud detection, and data mining are also expected to propel the market growth in the region.

Companies Covered
The key players of global deep learning market are Amazon Inc. (USA), Intel Corporation (USA), Samsung Electronics Co Ltd (South Korea), Micron Technology (USA), Sensory Inc. (USA), Xilinx Inc. (USA), Google LLC (USA), Mellanox Technologies (USA), Adapteva, Inc. (USA), Qualcomm Technologies Inc. (USA), NVIDIA Corporation (USA), Baidu Inc (China), IBM Corporation (USA), Advanced Micro Devices Inc. (USA), Facebook (USA), Tenstorrent (Canada), and Microsoft Corporation (USA).

Key Developments
- In October 2018, Facebook announced the launch of its deep learning framework PyTorch 1.0. The framework includes a set of tools which makes it more compatible with platforms like Google Cloud, Amazon Web Services, and Microsoft’s Azure Machine Learning.
- In October 2018, Intel launched Intel Vision Accelerator Design products that are equipped with AI targeted on analytics performance on edge devices. With these products, businesses can implement vision-based AI systems to collect and analyze data on edge devices for real-time decision making.

Market Segmentation
By Component: Hardware (processor, memory, network), Software (solution, platform), Services (installation, training, support & maintenance).
By Application: Image Recognition, Data Mining, Signal Recognition, Others.
By End-User: Security, Manufacturing, Retail, Automotive, Media & Entertainment, BFSI, Healthcare, Agriculture,

Key questions addressed by the report
Infographic Summary:

- What was the historic market size (2017)?
- Which segmentation (Component / Application / End-User) is driving market?
- What will be the growth rate by 2024?
- Who are the key players in this market?
- What are the strategies adopted by key players?

**Global Deep Learning Market**

Global Deep Learning market had market is expected to reach market value of USD 17.40 billion by 2023.

**Drivers**
- Increasing adoption of cloud-based services
- Increasing unstructured data leads to the increasing demand for deep learning solutions

**Restraints**
- Lack of technical expertise

**Opportunities**
- Advantages of deep learning solutions in healthcare, agriculture, and marketing automation application

**Geographical overview**

- North America
- Europe
- Asia Pacific
- Rest of the World

**Key Players**

- IBM
- Google
- Intel
- NVIDIA
- Baidu

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