Understanding Machine Learning

What is Machine Learning?

Machine Learning (ML) uses statistical algorithms that learn from existing data to make predictions about new data. For example, an algorithm can be trained to identify if a dog is in a picture by learning what a dog is through analysis of a large set of images of dogs. Once trained, it will be able to recognize a dog in any new images it encounters. These predictions can happen in batch or in real-time, such as a self-driving car understanding the world around itself while in motion.

Using the breadth of ML capabilities, organizations across a wide variety of industries, are able to gain insights from large amounts of data and leverage those insights to make better decisions and gain new competitive advantage.

Machine Learning Solutions

At Aritex IT we bring together the art and engineering required to deliver a Machine Learning solution worthy of your investment. We have helped many clients solve complex data challenges in the area of Natural Language Processing, Image Recognition, Fraud Detection and Customer Analytics. Uncover the benefits that only Machine Learning can provide, a better understanding of your customers, more accurate predictions, improved design criteria for cutting-edge applications, improved efficiency and cost reduction. This is an opportunity to advance your position in the market.

Who Uses Machine Learning?

As customer preferences and expectations for more customized service and support rapidly evolve, and the volume and complexity of data grows, organizations need to take action to stay one step ahead. ML technologies allow you to easily build a wide variety of predictive applications, including fraud detection, demand forecasting, and click prediction, and enables you to future-proof your business and manage the unknown unknowns.

FINANCIAL SERVICES	**GOVERNMENT**	**HEALTHCARE**	**MARKETING & SALES**	**TRANSPORTATION**
Prevent fraud, and identify investment opportunities	Increase process efficiency and minimize identity theft	Improve diagnoses and treatment by assessing patient's health in realtime using wearable devices and sensors	Personalize and optimize both the customer and user experience	Identify traffic patterns to make routes more efficient and predict potential problems

Benefits of Machine Learning on AWS

COMPREHENSIVE ANALYTICS

Services for data analysis including data warehousing, business intelligence, batch processing, stream processing, data workflow orchestration

BROAD FRAMEWORK SUPPORT

AWS supports all major frameworks, to enable you to build with the toolset you prefer

API-DRIVEN ML SERVICES

Easily add intelligence to any application with pre-trained services that provide computer vision, speech, language analysis, and chatbot functionality

SECURE

Granular controls and permission policies allows you to control access to resources and applications

MACHINE LEARNING FOR EVERYONE

Whether you are a data scientist, researcher, or developer, AWS offers tailored tools to meet your needs and level of expertise

DEEP PLATFORM INTEGRATION

ML services deeply integrated with the platform, including the data lake and database tools you need to run ML workloads

BREADTH OF COMPUTE OPTIONS

AWS offers a broad array of compute options for training and inference, including the most powerful GPU instances in the cloud

PAY-AS-YOU-GO

Consume services as you need them and only for the period you use them

AWS has a **rich APN partner ecosystem** that has **deep expertise in Machine Learning,** and can provide solutions that help organizations solve their data challenges, enable ML and data science workflows or offer SaaS based capabilities that enhance end applications with machine intelligence, seamlessly on AWS.

Aritex Consulting Solutions for Machine Learning

Our Design Approach: Step 1. Audit & Strategy - Create a solution's roadmap by assessing the challenges and opportunities. Step 2. Research and Development - Design the ML model blueprint with an detailed understanding of the landscape and possible datasets, then validate with a POC. Step 3. Cloud Services - Design the supporting cloud architecture based on business needs and technical requirements. Step 4 Deploy and Scale - Test ML model utilizing multi-sourced datasets, fine tune and deploy at scale. Let us help, Aritex IT is a certified Amazon Web Services professional and managed services provider. Led by business analysts and backed by more than 500 seasoned engineers and data scientists. We are application and data specialists with an ardent focus on Cloud Migrations, Dev Ops, Big Data & Analytics, Machine Learning and Artificial Intelligence

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Additional Resources and Information

Aritex.com
White papers, webinars and blog posts

Additional Resources & Info:
https://aws.amazon.com/machine-learning/
https://aws.amazon.com/blogs/machine-learning/
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