Machine Learning Services

Get on overview of Machine learning, Analytics, Cloud Search and Elastic Search services on AWS.

Machine Learning

There are a variety of ML services offered by AWS.

- 1. **SageMaker** is a fully-managed platform that enables developers and data scientists to quickly and easily build, train, and deploys machine learning models.
- 2. **Polly** turns text into lifelike speech, allowing you to create applications that talk, and build entirely new categories of speech-enabled products.
- 3. **Translate** is a neural machine translation service for language translation
- 4. **Comprehend** is a natural language processing (NLP) service that is used to discover insights and relationships in text.
- 5. **Recognition** API allows you to automatically identify objects, people, text, scenes, and activities, as well as detect any inappropriate content.
- 6. **Transcribe** is an automatic speech recognition (ASR) service. You can analyze audio files stored in Amazon S3 and have the service return a text file of the transcribed speech.
- 7. **Tensor Flow** helps developers get started with deep learning in the cloud. The framework has broad support in the industry and has become a popular choice for deep learning research and application development, particularly in areas such as computer vision, natural language understanding and speech translation.
- 8. **Lex** provides the advanced deep learning functionalities of automatic speech recognition (ASR) for converting speech to text, and natural

language understanding (NLU) to recognize the intent of the text, to

enable you to build applications with highly engaging user experiences and lifelike conversational interactions

9. **Machine Learning** provides visualization tools and wizards that guide you through the process of creating machine learning (ML) models without having to learn complex ML algorithms and technology.

Analytics

Athema is used to run SQL queries in your S3 bucket. Interactive query service that makes it easy to analyze big data that is in S# using SQL. This is serverless there is no infrastructure to manage, and you pay only for the queries that you run.

EMR – **Elastic Map Reduce**: is used for processing large amounts of data. This service provides a managed Hadoop Framework that makes it easy, fast and cost-effective to process vast amounts of data across dynamical, Scalable EC2 instances.

Quick Sight: is a BI service that makes it easy to build visualizations, perform ad-hoc analysis, and quickly get business insights from your data.

Data Pipeline is used to move your data across the various AWS services or from your on-premises to AWS. This service also offers various ETL type of tools. You don't have to worry about ensuring resource availability, managing inter-task dependencies, retrying transient failures or timeouts in individual tasks, or creating a failure notification system.

Glue is a fully managed extract, transform, and load (ETL) service that makes it easy for customers to prepare and load their data for analytics.