Accelerate your Machine Learning workflows with Amazon SageMaker

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AWS ML Stack

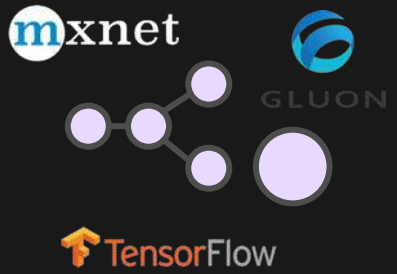
Application Services	API-driven services: Vision & Language Services, Conversational Chatbots
Platform Services	Deploy machine learning models with high-performance machine learning algorithms, broad framework support, and one-click training, tuning, and inference.
Frameworks & Infrastructure	Develop sophisticated models with any framework, create managed, auto-scaling clusters of GPUs for large scale training, or run inference on trained models.

Amazon SageMaker

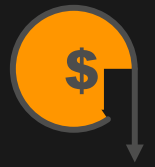
Build, train, and deploy machine learning models at scale

End-to-End Machine Learning Platform

Zero setup



Flexible Model Training



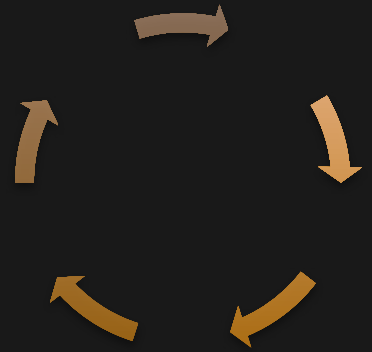
Pay by the second

Amazon SageMaker

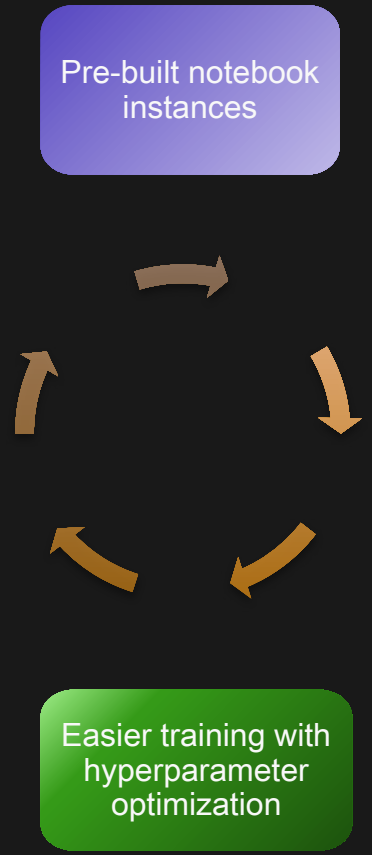
Build

Pre-built notebook instances

Highly-optimized machine learning algorithms



Amazon SageMaker



Build

scikit learn

mxnet

GLUON

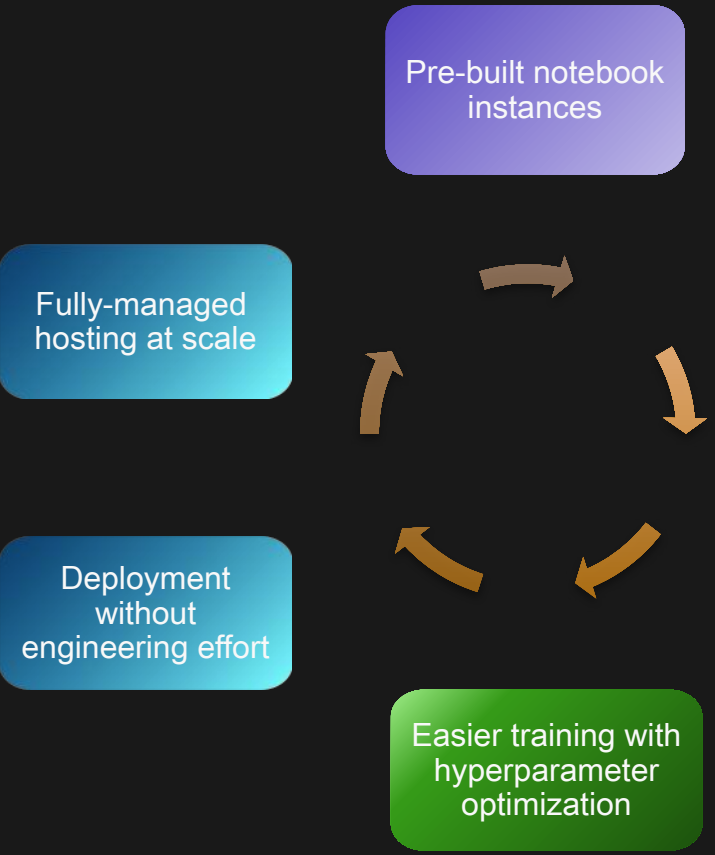
Train

TensorFlow

PYTORCH

aws

Amazon SageMaker



scikit learn
mxnet
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Amazon SageMaker customers

Intuit is a business and financial software company that develops and sells financial, accounting and tax preparation software and related services for small businesses, accountants and individuals.

"With Amazon SageMaker, we can accelerate our Artificial Intelligence initiatives at scale by building and deploying our algorithms on the platform. We will create novel large-scale machine learning and AI algorithms and deploy them on this platform to solve complex problems that can power prosperity for our customers."

- Ashok Srivastava, Chief Data Officer, Intuit

As the world's leading provider of high-resolution Earth imagery, data and analysis, DigitalGlobe works with enormous amounts of data every day.

"As the world's leading provider of high-resolution Earth imagery, data and analysis, DigitalGlobe works with enormous amounts of data every day. DigitalGlobe is making it easier for people to find, access, and run compute against our entire 100PB image library, which is stored in AWS's cloud, to apply deep learning to satellite imagery. We plan to use Amazon SageMaker to train models against petabytes of Earth observation imagery datasets using hosted Jupyter notebooks, so DigitalGlobe's Geospatial Big Data Platform (GBDX) users can just push a button, create a model, and deploy it all within one scalable distributed environment at scale."

- Dr. Walter Scott, Chief Technology Officer of Maxar Technologies and founder of DigitalGlobe

https://aws.amazon.com/sagemaker/customers/

Demos

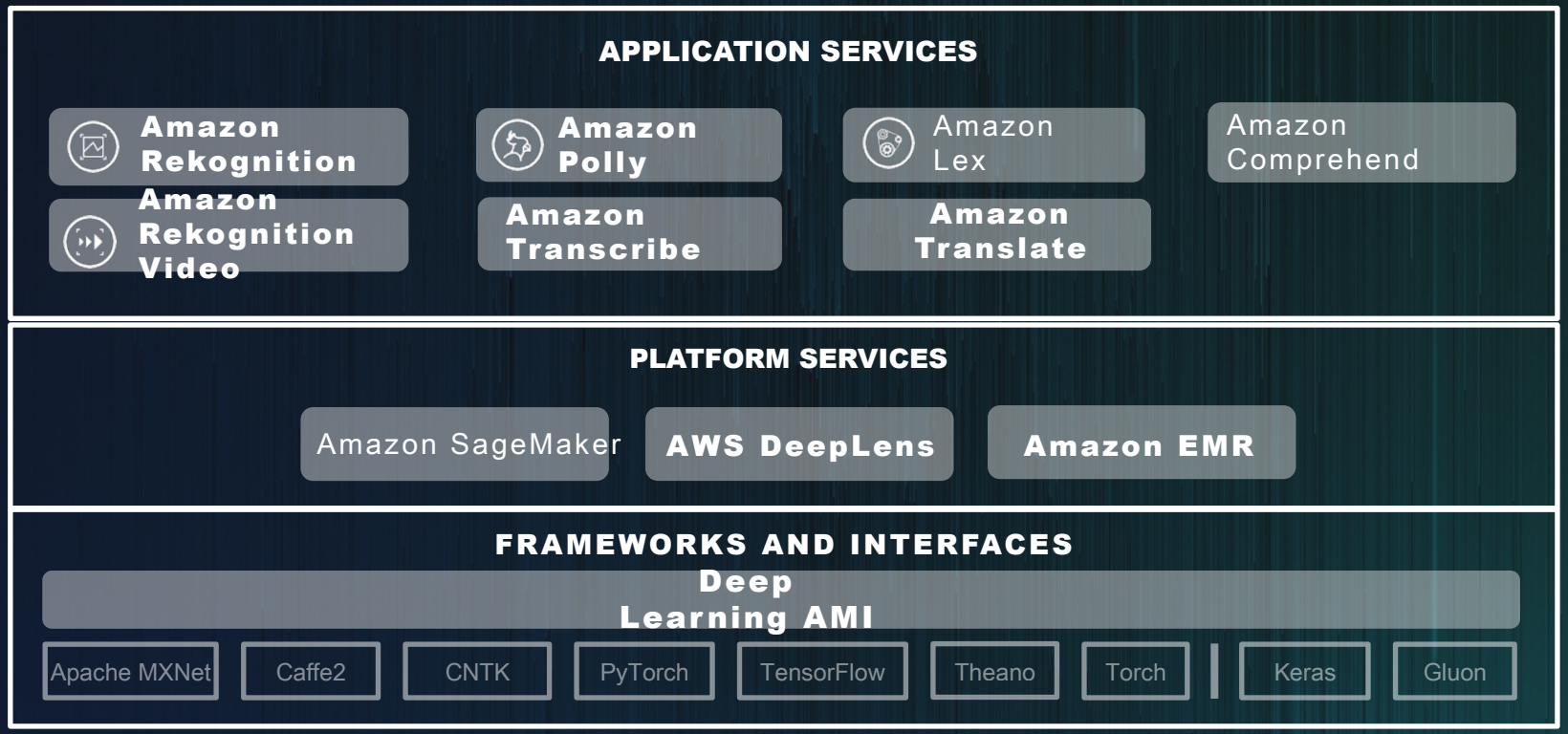
1. Off-the-shelf algorithm:
   classifying MNIST with XGBoost

2. Train with your own code:
   classifying the Iris data set with a DNN in Tensorflow

3. Deploying your own pre-trained model:
   clustering MNIST with k-means in scikit-learn

4. Bring your own algorithm:
   classifying the Iris data set with Decisions Trees in scikit-learn

Democratization of AI



Resources

https://aws.amazon.com/machine-learning

https://aws.amazon.com/blogs/ai

https://medium.com/@julsimon

Thank you!

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@julsimon