

Week 4 Notes and Resources

KEY TOPICS

AWS Deeplens and AWS IoT Analytics

This week, we took a look at the AWS Deeplens Device and then continued with building out our IoT application, using AWS IoT Analytics.

AWS Deeplens

AWS DeepLens is a wireless-enabled video camera and development platform integrated with the AWS Cloud. It lets you use the latest Artificial Intelligence (AI) tools and technology to develop computer vision applications based on a deep learning model.

AWS DeepLens uses the AWS IoT Greengrass service to deploy the application project and a Lambda runtime to your AWS DeepLens device, as well as the software or configuration updates.

AWS DeepLens is available for purchase at amazon.com. [This link](#) is for the US-based Amazon store. Please check your local Amazon site for local pricing and availability.

You can use the [Amazon SageMaker](#) service to train and validate models or import a pre-trained model.

To learn how to use Amazon SageMaker, please see our edX Course: [Amazon SageMaker: Simplifying Machine Learning Application Development](#).

AWS IoT Analytics

[AWS IoT Analytics](#) is a fully-managed service that makes it easy to run and operationalize sophisticated analytics on massive volumes of IoT data without having to worry about the cost and complexity typically required to build an IoT analytics platform. It is the easiest way to run analytics on IoT data and get insights to make better and more accurate decisions for IoT applications and machine learning use cases.

AWS IoT Analytics automates each of the difficult steps that are required to analyze data from IoT devices. AWS IoT Analytics filters, transforms, and enriches IoT data before storing it in a time-series data store for analysis. You can setup the service to collect only the data you need from your devices, apply mathematical transforms to process the data, and enrich the data with device-specific metadata such as device type and location before storing the processed data. Then, you can analyze your data by running ad hoc or scheduled queries using the built-in SQL query engine, or perform more complex analytics and machine learning inference. AWS IoT Analytics makes it easy to get started with machine learning by including pre-built models for common IoT use cases.

WHAT YOU ACCOMPLISHED THIS WEEK

- You added insight and visualization to your IoT application, using AWS IoT Analytics.
- You completed the course!

Please do complete the course survey! We hope you enjoyed the class.

LEARN MORE ABOUT AWS SERVICES

A variety of online learning resources are available. Here are a few recommendations to help you build on the knowledge you gained in this course:

- For unlimited access to foundational AWS training, visit our digital library at aws.amazon.com/training. We currently offer over 150 free online digital courses.
- AWS Training and Certification offers several courses that cover machine learning, Amazon SageMaker, and other ML services. You can access the courses at aws.amazon.com/training.
- Would you like to get AWS certified? Visit the AWS Certification page at aws.amazon.com/certification to get more information about exams, requirements, and prep courses.

Thanks for joining us! We look forward to seeing you in future AWS classes.