Developing Applications with AWS Rekognition

INTRODUCTION TO REKOGNITION

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What is Rekognition

- Image and video processing
- Identify objects
- Identify people
- Detect mood from facial expression
- Detect celebrities
- Unsafe image evaluation
- Read text
- Track people throughout a video

Person 98.9%

Animal 96.1%

Dog 96.1%

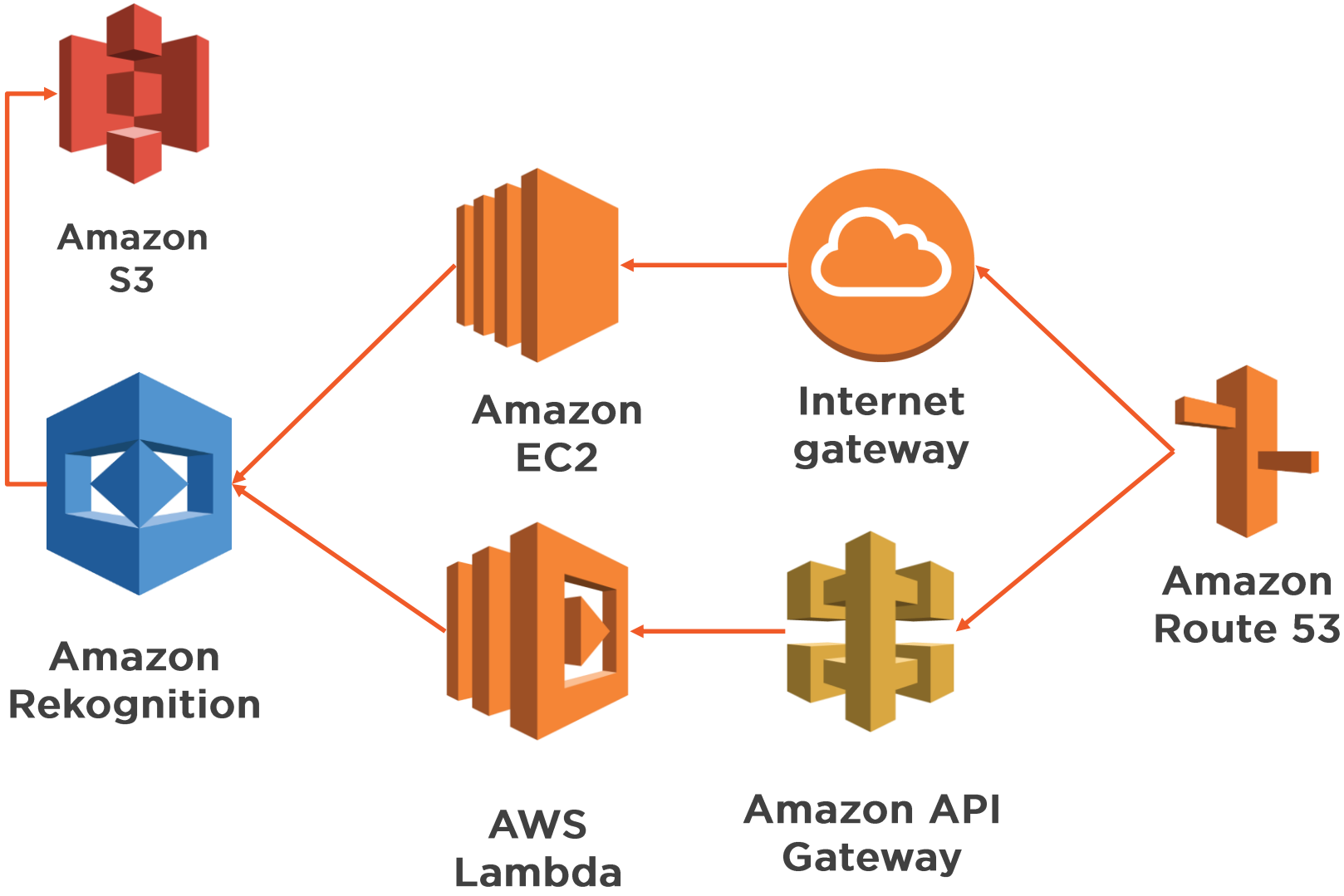
Pet 96.1%

Labrador Ret 96.1 %

Clothing 76.9%

Skirt 76.9%

Amazon Services Connected to Rekognition



Rekognition Services

Object and Scene Detection

Present of common objects, activities like sports, or concepts.

Image Moderation

Classify images based on filter parameters as unsafe of obscene.

Facial Analysis

Discover faces in an image and determine features like gender, wearing glasses, and emotion.

Rekognition Services (Continued)

Facial Comparison

Find a similar face in a group of faces.

Facial Recognition

From a group of faces, determine if one face is similar.

Celebrity Recognition

Detect the faces of popular or historic figures.

Rekognition Services (Continued)

Text in Image

Find and recover text from images. Street signs or license plates would be good examples.

Person Tracking

Track a person in a video even if the person leaves and re-enters the video.

Demo

Cloud 9 Development Environment

Text Detection using Python

Display parsed JSON output

Rekognition Command Line Demo

Demo

Create Cloud 9 Environment

Process Image with AWS CLI

Rekognition Python Demo

Demo

Look at JSON

Python and boto3

Process text in image

JavaScript Object Notation (JSON)

JavaScript Object Notation (JSON)

{

}

JavaScript Object Notation (JSON)

```
{
        “Name” : ”Value”




}
```

JavaScript Object Notation (JSON)

```
{
        “Name” : ”Value”,
        “Numeric” : 12345




}
```

JavaScript Object Notation (JSON)

```
{
        “Name” : ”Value”,
        “Numeric” : 12345,
        “MyArray” : [ 10 , 20 , 30]




}
```

JavaScript Object Notation (JSON)

```
{
        “Name” : ”Value”,
        “Numeric” : 12345,
        “MyArray” : [ 10 , 20 , 30],
        “MyObjArray” : [
                { “N1” : 100 },
                { “N2” : 200 }
        ]

}
```

Text Detection Sample File

Why Python?

Quick Start

Easy to setup and get started.

Easy to Understand

Code is readable and concise.

AWS Support

Many sample codes are written in Python.
Boto3 is well supported.