

Steps to run object detection algorithm in AWS

1. Create an AWS instance using **Amazon Linux 2 AMI** with **t2.micro** instance type and login to it. [Link](#)
2. Create “.aws” folder in home directory
 - a. `$mkdir .aws`
3. Create “.aws/config” file set its content as follows
[default]
region = us-west-2
4. Create .aws/credentials file whose content will be in following format
[default]
aws_access_key_id = <YOUR ACCESS KEY HERE>
aws_secret_access_key = <YOUR SECRET ACCESS KEY HERE>

To find access key and secret access key for your account, follow the steps as listed in this [link](#) under the “Programmatic access” topic.

If you were able to complete the steps, you are ready to use AWS Rekognition software.

5. Download [requirements.txt](#) and [rekognition_image_detection.py](#) to your Amazon instance.
 - a. If you prefer to clone directly from Github, you first need to install “git” tool to your instance via “`$sudo yum install git`”
 - b. Now, you can clone the repo using “`$git clone https://github.com/earslan58/GRAD778.git`” command
 - c. Cd into the GRAD778 folder; “`$cd GRAD778`”
6. Before you can run `rekognition_image_detection.py` file, first install the required python packages with the following command “`$pip3 install -r requirements.txt`”. This will download a few packages that are necessary to run the code.
7. Now you are ready to execute “`rekognition_image_detection.py`” file. To do so, run the following command “`$python3 rekognition_image_detection.py`” which will print detected images in several files. Here is sample output you should see if you can run the code properly.

City 98.40442657470703
Road 98.40442657470703
Building 98.40442657470703
Town 98.40442657470703
Person 97.3168716430664
Human 97.3168716430664
Downtown 93.56531524658203
Neighborhood 91.20529174804688
Path 90.67089080810547
Pedestrian 88.35414123535156
Awning 82.90605163574219
Canopy 82.90605163574219
Architecture 79.12799072265625
Sidewalk 69.58975219726562
Pavement 69.58975219726562
Walkway 68.40457153320312
Shop 64.24462127685547
Meal 61.64288330078125
Food 61.64288330078125
Clothing 59.63530731201172
Apparel 59.63530731201172
High Rise 57.25846862792969
Intersection 56.948787689208984
Deli 56.44071578979492
Found 26 labels.
Thanks for watching!

[ec2-user@ip-172-31-30-239 ~]\$