IMAGE **COMPONENT DETECTOR**

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INTRODUCTION

Main aim of this project is to extract important data from

**images. Using this extracte**d information description, **interpretation and understan**ding of the scene can be provided by the machine.

1

Features :

**Object detection**

**Color detection**

Object tracking is the process of locating

an object or multiple objects using

either a static or dynamic camera.

Color detection is necessary to recognize objects, it is also used as a tool in various

image editing and drawing apps.

**Image recognition**

**Image processing**

The component of image can be

recognised using different M algorithms or We can use the services provided by aws

**cloud or google**

**Image processing refe**rs to different **opperati**on done on the image to extract the **important features a**nd by using it we can

**perform reco**gnition operations.

**Image detector**

**Face detection**

**Machine leaming**

**For face detection** many libraries are

**available. We have** used opencv **Haarcascade classifier for class**ifying the

**Today, examples o**f machine leaming are **all arou**nd us. Digital assistants search the **web and play music in respond to our voice**

**face**

**commands**

Proposed System

Block Diagram, Flow Charts and Future Ideas

Block diagram

Input Image

Object Extraction

Pre Processing

Object is Recognised

Feature Detection

Feature Extraction

Feature Selection

Template Matching

Pre

Input Image (Query Image)

Object not Recognised

Processing

2

Flow Chart

Video Sequence

Frame Differencing

**Object Detection**

Optical Flow

**Backg**round sub..

Shape-based

Object classification

**Motion-based**

Color-based

**Texture-based**

Point-based

Object Tracking

Kernel-based

Silhouette-based

Implementation **Object Detection, Celebrities det**ection

IMAGE COMPONENT DETECTOR

session = boto3.Session(profile\_nanc="default") Service - session.client("rekeghitien")

Person

Persor Person PersoRerson Prson

Persone Pepetaon

Pers Persson

Person

*Cla*sses

Perso

*Se* Perso

der Object Detection magePath Same):

session = boto3.Session(profile name:"default") Service = session.client("rekognition')

image = open(imagePath, "rb").read() imgh, ingu = cv2.imread (imagePath). shapel:2] MyInade = cv2.imread (imagePath) response = Service.detect labels(image {"Bytes": image}) Tor objects in responsel "Labels"):

if objects("Instances"):

object Name = objects Name" ] Tor boxs in objects instances"):

BOX - boxslBoundingBox) X = int(ingl \* box["Left 1) y = int(ingh \* box["Top"]) \* = int(imgw \* box["width"]) h = int(ingh • box["Height"])

ars

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n), ca, 255, 2), 2)

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Using this extracted information

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provided by the machine

0

127.0.0.1:8000

Image Detector The Art of Detection

**Get more things don**e with loggin platform.

Play with Images

CONCLUSION

The goal of this project is to design an all purpose application using various ways of image **processing and obje**ct detection. Going through **different options availab**le, the program will be **capable of color recognition, face detection,** human counting, and image recognition. For future work, we can conduct a more **thorough test of our m**atching algorithm **using larger dataset an**d more rigorous **diagnosti**cs of the algorithm.

Object Detection

Choose File No File chosen

Play

CE

**User friendly**

vailable

**Free to use**

**Available - Multiple**

**Platforms**

**High demand**

In our daily **life we come across different types of image processin**g. The best example of image processing in our daily life is our brain

**sensing a lot of objects/images when we see images** with eyes and processing is done in very less time

2020

Thank you for

listening

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