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| **Tech Saksham**  Final Project Report  **Track Name** |  |  |

**GOOGLE AI IMAGES-OBJECT DETECTION**

**AIMAN COLLEGE OF ARTS AND SCIENCE FOR WOMEN**

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| --- | --- |
| **ROLL NO** | **NAME** |
| CB20S199520 | M.ARCHANA |
| CB20S259881 | S.ASHA BANU |
| CB20S259886 | S.FASEEHA BANU |
| CB20S259894 | R.LAKSHMI SOWNTHARIYA |
|  |  |

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| --- | --- |
|  |  |
|  | Trainer Name:Deep Dive |
|  | Master Trainer:Mayank shrivastava |

**ABSTRACT**

To allow better analysis of the challenge results, we encourage all participants to submit a short abstract describing their method.

* Any external models and data used for the competition.
* Details of the model architecture and data augmentation methods if  
  used.
* Any other technical details you consider interesting and references to the relevant published work.  
  The participants of the challenge are also encouraged to present their approach on the poster session on the workshop. We have 20 poster slots that will be distributed on the 'first come-first serve' basis. The call for poster is [here](https://www.kaggle.com/c/google-ai-open-images-object-detection-track/discussion/63386).

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**CHAPTER 1**

**INTRODUCTION**

* 1. **Overview**
  2. **Feature**
  3. **Advantages**
  4. **Scope**
  5. **Future Work**

**CHAPTER 2**

**SERVICES AND TOOLS REQUIRED**

**2.1 Services Used**

**2.1.1 Liberty Profile**

**2.2 Tools and Softwares used**

**2.2.1 NodeJS**

**2.2.2 HTML**

**2.2.3 Cloud Foundry**

**CHAPTER 3**

**PROJECT ARCHITECTURE**

**3.1 Architecture**

**USER FRONTEND BACKEND**

|  |  |  |
| --- | --- | --- |
|  | **HTML 5** | **NODEJS 14.0**  **Database** |

**CHAPTER 4**

**ARCHITECTURE BLOCKS DETAIL WORKING**

**4.1 Blocks**

* Fundamental functionality and attributes: semantic, unambiguous, including security capability and manageability
* Interfaces: chosen set, supplied (APIs, data formats, protocols, hardware interfaces, standards)
* Dependent building blocks with required functionality and named user interfaces

Map to business/organizational entities and policies

**CONCLUSION**

Conclusion

We propose a multi-scale image quality transformer (MUSIQ), which can handle full-size image input with varying resolutions and aspect ratios. By transforming the input image to a multi-scale representation with both global and local views, the model can capture the image quality at different granularities. Although MUSIQ is designed for IQA, it can be applied to other scenarios where task labels are sensitive to image resolution and aspect ratio. The MUSIQ model and checkpoints are available at our GitHub repository.

**REFERENCES**

https://www.kaggle.com/c/google-ai-open-images-object-detection-track

**CODE**

**Please Provide Code through Git Hub Repo Link** import numpy as np

import pandas as pd

import matplotlib.pyplot as plt

import torch

import cv2

from PIL import Image, ImageColor, ImageDraw, ImageFont

import cv2, os, glob, time

import xml.etree.ElementTree as ET

import tensorflow as tf

from tensorflow.keras import Model

from tensorflow.keras.layers import (

Add, Concatenate, Conv2D,

Input, Lambda, LeakyReLU,

MaxPool2D, UpSampling2D, ZeroPadding2D

)

from tensorflow.keras.regularizers import l2