

Summer Project

Assignment 7

CILAB

A Computer Vision Tutorial



August 21, 2023

Problem 2

1. Due date: 08.27. (Sun) 11:59 P.M.
2. Goal: Do analysis of **Robustness**, **Consistency**, **Frequency**, and **ShapeTexture** on CIFAR100 and ImageNet. And make new analysis define.
3. Rules:
 - a) Do **Robustness** analysis on imageNet with a CNN and Transformer of your choice. And describe the differences of them at least two things.
 - b) Do **Consistency** analysis on imageNet with a CNN and Transformer of your choice. And describe the differences of them at least two things.
 - c) Do **Frequency** analysis on imageNet with a CNN and Transformer of your choice. And describe the differences of them at least two things.
 - d) Do **ShapeTexture** analysis on imageNet with a CNN and Transformer of your choice. And describe the differences of them at least two things.
 - e) Do the same analysis on the your model on CIFAR100, and talk about how it could be improved.
 - f) Compare the graph or performance about before and after model improvements.
 - g) Create or make new analysis. You can come up with new analytic on your own, or you can add existing ones to the **analysis framework**.
 - h) Write a report as in the previous assignment. In addition, please explain how to interpretation, use, and theory of your new analysis.
4. Program:
 - Start: 08.21 (Mon)
 - QnA: 08.24 (Thu) 10 A.M.
 - End: 08.27 (Sun) 11:59 P.M.