

Homework 6

Due: 2021-11-24 (Wed.) 8pm

Introduction

In this assignment, you will also explore methods for visualizing the features of a pretrained model on ImageNet.

- Explore various applications of image gradients, including saliency maps, fooling images, class visualizations

• Setup

- **Start IPython**

you should start the IPython notebook from the `homework_6` directory, with the jupyter notebook command.

• Experiments

There are `### START CODE HERE`/`### END CODE HERE` tags denoting the start and end of code sections you should fill out. Take care to not delete or modify these tags, or your assignment may not be properly graded.

- **Q1: Network Visualization (50 points)**

The Jupyter notebooks `NetworkVisualization-PyTorch.ipynb` will introduce the pretrained SqueezeNet model, compute gradients with respect to images, and use them to produce saliency maps and fooling images.

- **See the code file for details.**

• Submission

You need to accomplish the following files:

- 1) **Convolutional Neural Networks**

- `NetworkVisualization-PyTorch.ipynb`

- 2) **Report**

- Please convert your experiment report to PDF format.
- You just need to upload all your code and report and do not upload datasets.