Final Competition of Deep Learning 2022

Version 1.0

October 28, 2022

Introduction

As we're sadly approaching the end of this course, we thought it would be fun to fire up a competition. You will compete with your classmates on who can find the best self/semi-supervised learning algorithm. We will give you a dataset with a large amount of unlabeled data and a small amount of labeled data to train your model, and the final performance of your model will be evaluated on a hidden test set and posted on a public leaderboard.

We will be working in teams of 3-4 for this project. **Please fill the Team List as soon as possible**. If you have not chosen teams by the deadline below, we will randomly assign you to a team.

Please choose a teamname made out of only alphanumeric characters (no spaces, no special symbols) to expedite grading.

Overview

The dataset of color images of different sizes, that has the following structure:

- 512,000 unlabeled 224×224 images,
- 30,000 labeled (bounding boxes of 100 classes) training images with different sizes,
- 20,000 labeled (bounding boxes of 100 classes) validation images with different sizes

Overall, we'll keep for ourselves a hidden test set, with which we'll be testing your models. In order to improve performance when training your model with

few labeled samples, you'll need to make use of the unlabeled data. You're encouraged to utilize all kind of SSL techniques in order to beat your peers on the leaderboard, and, of course, learn something new.

Schedule

- `11/02 23:55`: team information submission deadline: Team List
- `11/18 23:55`: the first leaderboard submission deadline
- `12/02 23:55`: the second leaderboard submission deadline
- `12/09 23:55`: the final leaderboard submission deadline
- `12/14 16:55-18:55`: virtual poster session
- `12/20 23:55`: paper submission deadline

Leaderboard

There are three leaderboards during the whole competition. For all the leaderboards, you need to submit a trained model to us, and we will test its performance with the hidden testing set. Only the final leaderboard is used to grade your project. However, we highly recommend you to participate at least one leaderboard, so you can make sure you understand how to submit your model.

We'll be adding information on how you should submit the model to us at a later time.

Rules

- You are not allowed to use any external images or pre-trained weight. You will fail the course if you violate this rule.
- You are not allowed to use the labeled validation set to train your models. You will fail the course if you violate this rule.
- Make sure you test your submission before sending to us. You will get penalty for submitting code unable to run. Submitting to the leaderboard will allow you to test if your code will reasonably run on our grading servers.