HW1

Video Action Classification

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Submission Deadline:

2022/10/21 23:59

Submit to E3 and Kaggle

Hard deadline, No extensions

Dataset

- Train set
  - There are 30000 videos and 39 categories.
  - The root directory is `train`. Each subfolder in `train` contains videos of one category.
- Test set
  - There are 10000 videos without labels.
  - All videos are in `test` directory.
- All videos are 8FPS and ≤ 10 seconds.


Evaluation

- Metric: classification accuracy of test videos.
- Baseline accuracy is 0.60.

Grading Scheme

- μ, σ are calculated on accuracy ≥ 0.6.

Your Accuracy s	**Points**
$s \geq \mu + \sigma$	100
$s \geq \mu + \frac{1}{2}\sigma$	95
$s \geq \mu - \sigma$	90
$s \geq \mu - 2\sigma$	85
$s \geq 0.6$	80
$s \geq 0.4$	Linear between $60 \sim 80$

Kaggle

- Use this link to participate in the competition.
- Rename your team name to your student ID.
- Maximum daily submissions is 5.
- Public leader board shows the accuracy of only 50% test data. Your final accuracy is evaluated on the other 50% test data.
- Everyone can optionally select 2 submissions as your final submissions.

Kaggle Submission Format

- Save predictions in csv format and submit to Kaggle:

```
name,label
00001.mp4,23
00004.mp4,0
...
```

  - `name` is the file name.
  - `label` is in range $0, 1, \ldots, 38$ which is same as the name of subfolders in `train`.

Programming Spec

- Use `Python3.6` or later versions.
- For deep/machine learning packages, only fundamental frameworks are allowed (`TensorFlow`, `PyTorch`, `Keras`, `sklearn`, `xgboost` etc.).
- You can google, but you need to write your own code.
- Pretrained weights and external data are forbidden.

Source Code Zip Spec

- Zip your source code into `StudentID.zip` and submit to E3, e.g., 0850726.zip.
- Add a `readme` file describing how to run training and prediction.
- Do not include dataset or model weights in `StudentID.zip`.
- Please refer to the provided `example.zip`.

Note

- Training may take several days, so it is recommended to start as soon as possible.
- Send email to other TAs will not respond.