

# HW1

## Video Action Classification

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**Submission Deadline:**

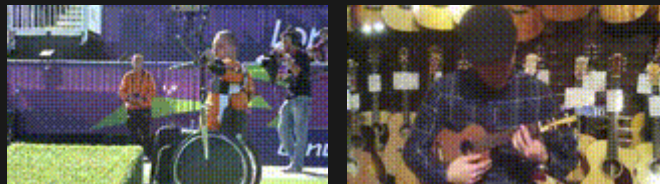
**2022/10/21 23:59**

**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  $\leq 10$  seconds.



# Evaluation

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

# Grading Scheme

- $\mu, \sigma$  are calculated on accuracy  $\geq 0.6$ .

| 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 ~ 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, ..., 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.