Monk AI Cheatsheet Cheat Sheet

by [deleted] via cheatography.com/101890/cs/21192/

Modes

Quick mode	Use default param settings
Update mode	Update default param settings
Analysis mode	Find hyper params
Expert mode	Set params from scratch
Compare mode	Compare against output metrics

Backend Frameworks

Pytorch	v1.2.0, v1.3.0
Keras	v2.2.5, v2.3.1
GluonCV	v0.5.0
Mxnet	v1.5.1
Cuda - Support	v9.0, v10.0

OS and Python

Ubuntu	v16.04, v18.04
Mac-OS	-
Windows	v10
Python	v3.5, v3.6, v3.7

Unique Features

Write syntax invariant code

Resume interrupted experiments

Move workspaces across systems and continue training/inferencing

Compare experiments visually

Auto find hyper params

Run training/inferencing on sub-sample of original datasets

Installation

```
$ git clone
https://github.com/Tessellate-
Imaging/monk_v1
$ pip install -r monk_v 1/i -
nst all ati on/ req uir eme -
nts _cu 10.txt
```

Choose the right requirements file as per platform, OS and cuda support

Setup - Pythonpath

```
import sys
sys.pa th.a pp end ("mo nk_ -
v1/ mon k")
```

Backend selection

```
from pytorc h_p rot otype import prototype
from gluon_ pro totype import prototype
from keras_ pro totype import prototype
```

Select from pytorch, gluon and keras

Experiment creation

```
ptf = prototype(verbose=1);
ptf.Pr oto typ e("s amp le- -
pro jec t-1 ", " sam ple -ex -
per ime nt- 1");
ptf = protot ype (ve rbo se=1);
ptf.Pr oto typ e("s amp le- -
pro jec t-1 ", " sam ple -ex -
per ime nt- 2");
```

Directory sturcture created -
workspace
|----- sample-project-1
|-----------sample-experiment-1
|-----------sample-experiment-2

Quick Mode - Training

```
ptf.Default(dataset_path="train",
                                -
mod el_ nam e="r esn et1 8",
                                -
num _ep och s=2);
ptf.Tr ain();
```

1. Set dataset path
2. Set model name
3. Set number of epochs to train

Inferencing

```
out =
ptf.Infer(img_name="path_to_img");
out = ptf.In fer (im g_d ir= " -
pat h_t o_d ata set ");
```

Infer over image or entire directory of images.

By **[deleted]**
cheatography.com/deleted-101890/

Published 21st November, 2019.
Last updated 21st November, 2019.

Sponsored by **Readable.com**
Measure your website readability!
https://readable.com