

2018 HeLP Challenge

2018년 11월 28일

대회 진행 순서

일정

Tumor

- training: 2018.12.01~2019.01.13
- submission: 2018.12.29~2019.01.13
- leaderboard: ~2019.01.06

Cardiac

- training: 2018.12.01~2019.01.13
- submission: 2018.12.29~2019.01.13
- leaderboard: ~2019.01.06



User

- Docker image build
- Docker image save (.tar.gz)
- Docker image upload

System

- run ./train.sh && ./inference.sh

train & validation set



System

- run ./inference.sh

test set

Data path

Path	Description
/data/train	training data set (image & label)
/data/test	test data set (test용 image)
/data/model	task의 model data 저장용
/data/output	task의 inference 결과 저장용 (score 산정시 사용)

./train.sh

- **/data/train** 의 training data로 학습
- 학습 모델을 **/data/model** 에 저장

./inference.sh

- **/data/model** 에서 저장된 model load
- **/data/test** data로 inference
- 결과 파일을 **/data/output** 에 저장

화면 설명

● Task

- Container 실행 단위
- Upload 및 Submit 마다 1개씩 실행

파일 목록 보기

- Train: training data (image & label)
- Test: test image data
- Output: inference 결과 파일명

Train (image) Train (label) Test (phase1) Output (phase1) Test (phase2) Output (phase2)

Phase 1

Phase 1's Rank

Phase 2

Phase 2's Rank

2017-11-01 09:00 ~ 2019-11-01 09:00

Upload

ID	Progress	Status ▾	Score (DSC) ▾	Distance (HD95) ▾	Metrics	Log/Error	CreatedAt ▾	FinishedAt ▾	Actions
afd82ec3-ba35-44a1-b875-8209ed875583	<div><div></div></div> 100%	finished	1	0	☰	stdout ⬇ stderr ⬇	2018-11-09 22:09	2018-11-09 22:17	Submit

output file별
metric 정보
보기

task의 stdout, stderr file
download (last 1M)

task를
phase2로 제출

DEMO

Docker

파일 구조

```
.
├── Dockerfile
├── inference.sh
├── src
│   ├── inference.py
│   └── train.py
└── train.sh
```

`inference.py`: 작성 해야 할 코드

`train.py`: 작성 해야 할 코드

./train.sh

```
1  #!/usr/bin/env bash
2  python src/train.py
3
```

./inference.sh

```
1  #!/usr/bin/env bash
2  python src/inference.py
```

Dockerfile

```
1  >> FROM tensorflow/tensorflow:latest-gpu
2
3  WORKDIR /
4
5  COPY . .
6
```

버전 바꾸기

Docker 빌드 참조 링크

<https://docs.docker.com/engine/reference/builder>

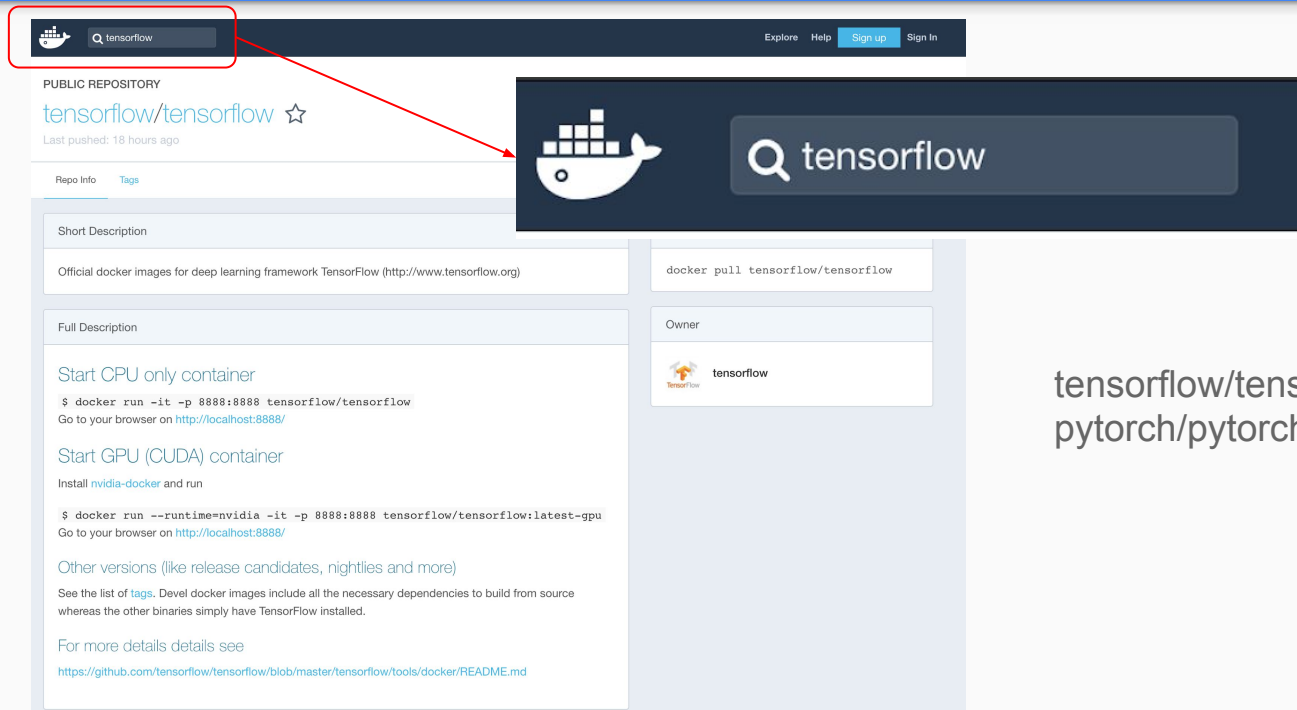
<http://pyrasis.com/book/DockerForTheReallyImpatient/Chapter04/02>

NVIDIA Driver

CUDA 9.0

cuDNN 7

hub.docker.com



The screenshot shows the Docker Hub interface for the `tensorflow/tensorflow` repository. The top navigation bar includes a search bar (highlighted with a red box) and links for Explore, Help, Sign up, and Sign in. The repository page shows the name `tensorflow/tensorflow` with a star icon and a note that it was last pushed 18 hours ago. The page is divided into sections: Short Description, Full Description, and Owner. The Short Description states: "Official docker images for deep learning framework TensorFlow (http://www.tensorflow.org)". The Full Description provides instructions for starting a CPU-only container and a GPU (CUDA) container, along with links to tags and the README.md file. The Owner section shows the TensorFlow logo and the name "tensorflow".

PUBLIC REPOSITORY

tensorflow/tensorflow ☆

Last pushed: 18 hours ago

Repo Info Tags

Short Description

Official docker images for deep learning framework TensorFlow (http://www.tensorflow.org)

Full Description

Start CPU only container

```
$ docker run -it -p 8888:8888 tensorflow/tensorflow
```

Go to your browser on <http://localhost:8888/>

Start GPU (CUDA) container

Install `nvidia-docker` and run

```
$ docker run --runtime=nvidia -it -p 8888:8888 tensorflow/tensorflow:latest-gpu
```

Go to your browser on <http://localhost:8888/>

Other versions (like release candidates, nightlies and more)

See the list of [tags](#). Devel docker images include all the necessary dependencies to build from source whereas the other binaries simply have TensorFlow installed.

For more details details see

<https://github.com/tensorflow/tensorflow/blob/master/tensorflow/tools/docker/README.md>

Owner

tensorflow

tensorflow/tensorflow:1.12.0-devel-gpu-py3
pytorch/pytorch:0.4.1-cuda9-cudnn7-devel

Q&A

<https://help-khidi.kakaobrain.com>

오픈 준비중
감사합니다.