

Deep Learning

Practice 1 – Introduction

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Lecture Repo

- <https://github.com/Solrefa/fira-2018-deeplearning>
- Lecture files will be uploaded
- Download or clone (or fork) the repository

Pytorch

- A Deep Learning framework (sponsored by Facebook)
 - Numpy-style tensor computation with GPU acceleration
 - Auto-differentiation with dynamic graph construction
 - Python API
 - Fast, flexible, easy to learn and implement!
- <https://pytorch.org/>

Dynamic Graph

A graph is created on the fly

```
x = torch.randn(1, 10)
prev_h = torch.randn(1, 20)
W_h = torch.randn(20, 20)
W_x = torch.randn(20, 10)
```



Installation

For python 2.7 and CUDA 9.0

- pip install torch torchvision

Without CUDA

```
pip install http://download.pytorch.org/whl/cpu/torch-0.4.1-cp27-cp27mu-  
linux_x86_64.whl  
pip install torchvision
```

Documentation and tutorials

- <https://pytorch.org/docs>
- <https://pytorch.org/tutorials/>