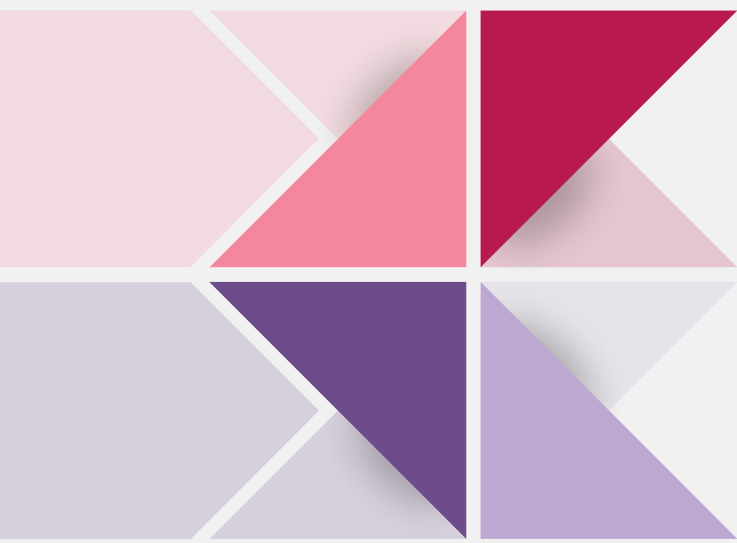




Policy and Introduction of Course





01

Policy

Policy

Time

- 9:05-12:00, Wednesday

Teaching method

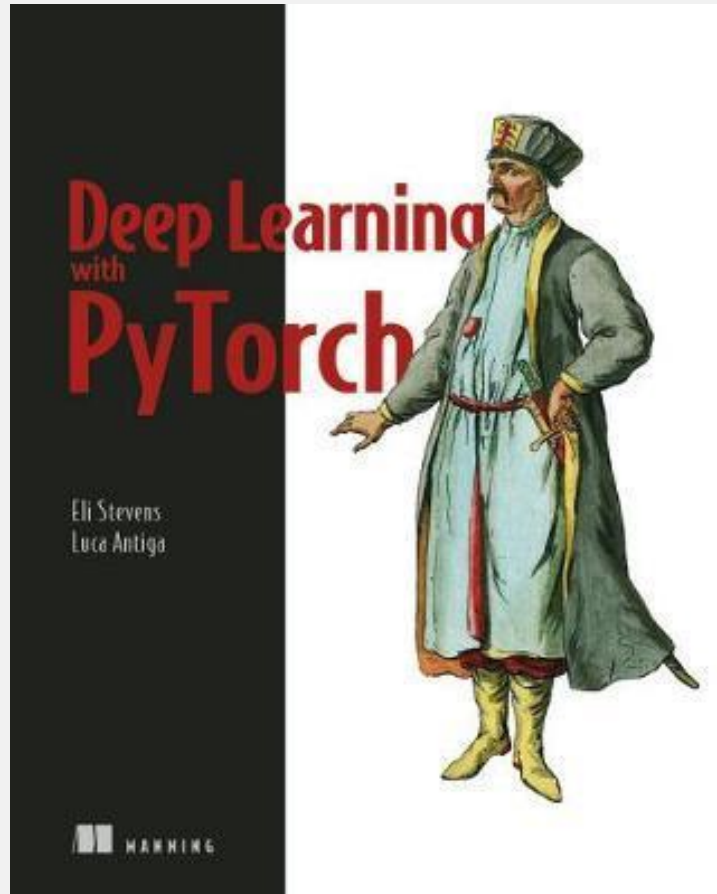
- Slide and practice
 - <https://people.csie.ncue.edu.tw/yshuang/CI.html>

Orientation

- Complementary to content from other related courses
- Theory and homework
- Deep learning

Policy

Reference



Deep Learning with Pytorch - Manning Publication



<https://pytorch.org/>



<https://arxiv.org/>

Policy

How to get score and pass this course?

- No Exam
- Homework (60%)
 - Personal work
- Paper Presentation (40%)
 - Personal presentation

Policy

Homework (70%)

- HW1 (20%): Image Classification
- HW2 (20%): Image Generation
- HW3 (20%): Image Attack

Rules

- Upload model's result to Kaggle platform or NCUE's cloud for evaluation
 - If achieving baseline, you will get the basic score
 - If achieving strong baseline, you will get the good score
- Upload report to NCUE's cloud course
 - Word or PDF
 - Architecture, Method (with code highline), Learned with course and homework, Conclusion
 - Code

Policy

How to make the Presentation

- Read a paper in three years
- Presentation
 - Purpose, contribution, running code, your conclusion, etc.

揚鷹生獎勵金

揚鷹計畫目標

- 扶助經濟不利學生安心就學

揚鷹生(經濟不利)

- 本國籍本校在學生且同時符合以下身分之一即可申請
 - 具學雜費減免
 - 具弱勢學生助學計畫助學金補助
 - 原住民學生
 - 家庭突遭變故經本校王金平先生關懷揚鷹生急難扶助金審核通過者
 - 具中華民國國籍且懷孕或撫養未滿3歲子女者



揚鷹網站



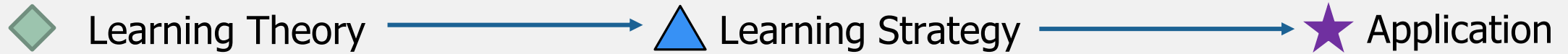
校內獎助金



02

Introduction

Introduction



- Deep Learning Concept
 - CNN
 - Forward and backward
 - Loss function
 - Gradient descent
 - Learning rate
 - Validation
- Training Tips
 - Error
 - Gradient unstable
 - Optimization

- Supervised
- Unsupervised
- Semi-supervised
- Self-supervised
- Reinforcement

- Common Model
 - Detection
 - Segmentation
 - Classification
- Generative AI
 - Language
 - Image
- Attack and Defense
- Anomaly Detection

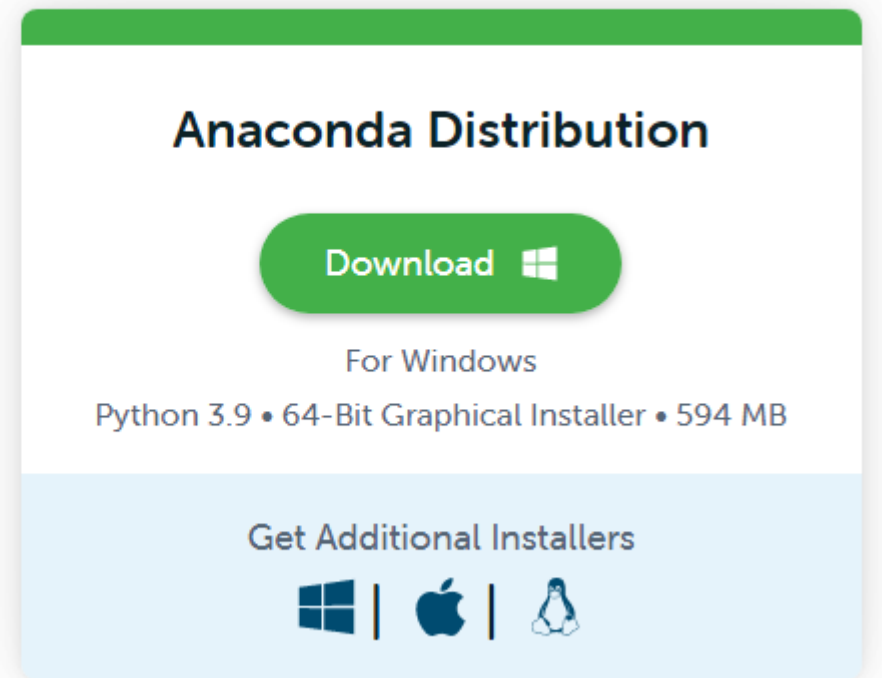
Introduction

Prepare File


Individual Edition is now

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[Reference](#)