

Applied Deep Learning

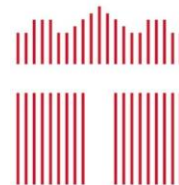


Course Logistics



September 8th, 2022

<http://adl.miulab.tw>



National
Taiwan
University
國立臺灣大學

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Course Logistics

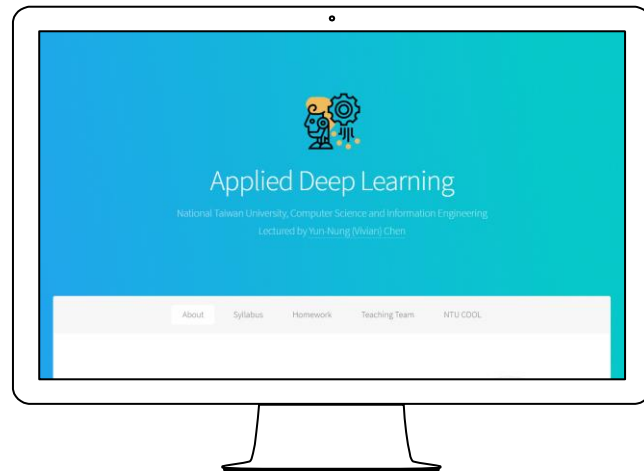
- Instructor: 陳縉儂 Yun-Nung (Vivian) Chen
- Time: Thursday 234, 9:10-12:20
- Location: Online @YouTube & COOL

○ Website: <http://adl.miulab.tw>

○ NTU COOL: <https://cool.ntu.edu.tw/courses/19828>

○ Email: adl-ta@csie.ntu.edu.tw

- To ensure timely response, email title should contain “[ADL2022]”
- Do NOT send to our personal emails



Always check the up-to-date information from the course website

NTU COOL for Fighting Coronavirus

- ◎ NTU COOL
 - Lecture videos
 - Comments anytime
 - Assignment submission (還可以寫 code 呢!)
- ◎ Slido QA
 - #ADL2022
- ◎ TA Team
 - Forum discussion (preferred)
 - Email QA
 - TA recitation/hours (maybe virtual)



Course Goal

- ◎ The students are expected to understand
 1. how deep learning works
 2. how to frame tasks into learning problems
 3. how to use toolkits to implement designed models, and
 4. when and why specific deep learning techniques work for specific problems

Pre-requisites

Course

- Required: college-level calculus, linear algebra
- Preferred: probability, statistics

Programming

- proficiency in Python; all assignments will be in Python
- GitHub; all assignments will be handed in via GitHub
- Kaggle; all assignments will be submitted to Kaggle



[\(tutorial](#) from Stanford)

GitHub

[\(tutorial](#)



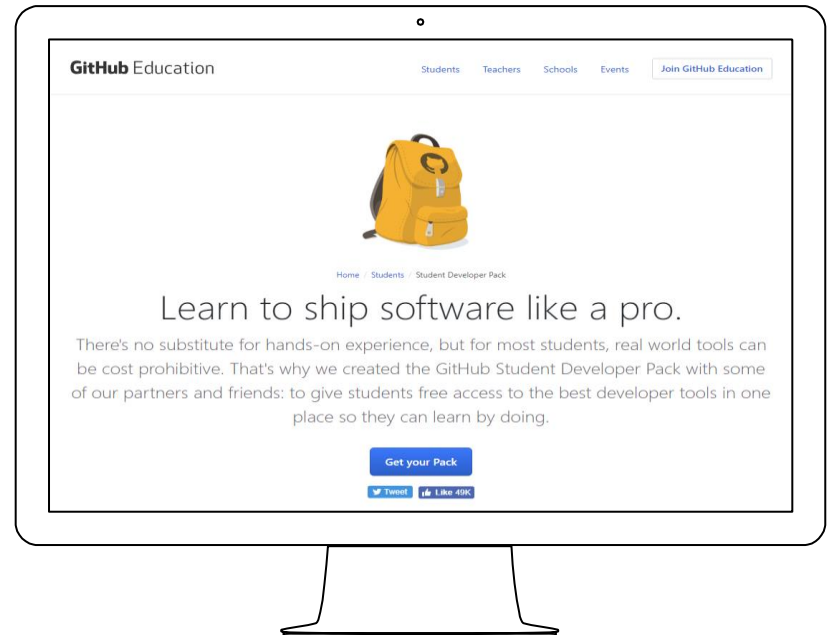
kaggle

[\(website\)](#)

Please consider your available resources for taking this course

GitHub Student Pack

- The [student plan](#) provides unlimited private repositories
 - make your assignments private before the due date
 - make them public afterwards



Grading Policy



- ◎ 3~4 Individual Assignment: 60%
 - GitHub code w/ README
 - The score is based on **coding** and the **report**
 - Bonus points for outstanding performance
 - **Late policy: 25% off per day late afterwards**
- ◎ Final Group Project: 35%
 - GitHub code, Project document
 - Bonus points for the outstanding work
 - Final presentation (format TBA)
- ◎ Participation: 5%
 - Forum/slido discussion involvement
 - Write-up for the special events

Understanding the difference between “collaboration” and “academic infraction”

Individual Assignments

Automatically find names of people, places, and organizations in text across many languages.



A1. Sequence Tagging

A2. Transformer / BERT

A3. Language Generation

Final Group Project (2~5 persons)

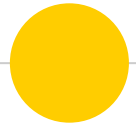
- The final project topic will be announced later
 - Presentation
 - Poster or oral presentation
 - Peer grading
 - Project Report & Code
 - Wrap-up project report
 - GitHub code submission w/ README



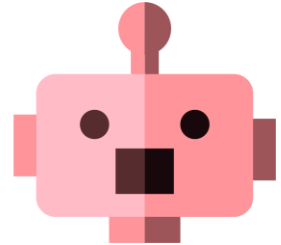
The project details will be announced later

Tentative Schedule

Week	Topic	Assignment
1 2022/09/08	Course Logistics, Introduction	A0 – Python Tutorial
2 2022/09/15	NN Basics, Backpropagation	
3 2022/09/22	Word Representations, RNN	A1 – Sequence Tagging
4 2022/09/29	Gating, Word Embeddings	
5 2022/10/06	ELMo, Attention	
6 2022/10/13	Transformer, BERT	A2 – BERT
7 2022/10/20	More BERT	
8 2022/10/27	Midterm Break	
彈性補充	RL, Value-Based RL, Policy Gradient + Actor-Critic	
9 2022/11/03	Subword, Natural Language Generation, Perplexity	A3 – NLG
10 2022/11/10	Model Pre-Training	
11 2022/11/17	Modern Conversational AI	
12 2022/11/24	E2E Conversational AI	
13 2022/12/01	Beyond Supervised Learning	Final Project
14 2022/12/08	Prompt-Based Learning	
15 2022/12/15	Issues in NLP	
2022/12/22	Final Break	
16 2022/12/29	Final Project Presentation	



Teaching Assistant Team



Rules



Asking questions is encouraged!!

**Any comment or feedback is preferred!!
(speed, style, etc)**



**I
♥
T.A**

Attending TA hours!! (details TBA)



Thanks!

Any questions ?

You can find the course information at

- <http://adl.miulab.tw>
- adl-ta@csie.ntu.edu.tw
- slido: #ADL2022
- YouTube: Vivian NTU MiuLab