## Applied Deep Learning



## **Course Logistics**



February 22nd, 2021 <a href="http://adl.miulab.tw">http://adl.miulab.tw</a>



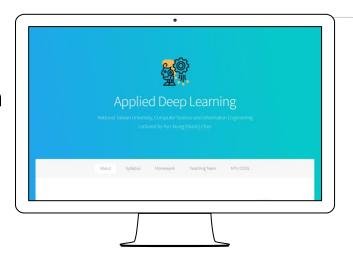
National Taiwan University

#### **Course Logistics**

Instructor: 陳縕儂 Yun-Nung (Vivian) Chen

Time: Monday 234, 9:10-12:20

● Location: 資103



Website: <a href="http://adl.miulab.tw">http://adl.miulab.tw</a>

NTU COOL: <a href="https://cool.ntu.edu.tw/courses/4591">https://cool.ntu.edu.tw/courses/4591</a>

Email: <u>adl-ta@csie.ntu.edu.tw</u>

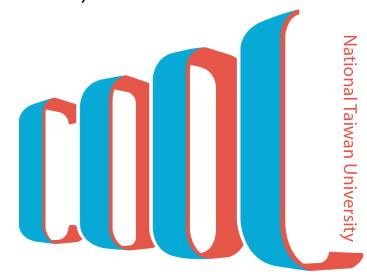
To ensure timely response, email title should contain "[ADL2021]"

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
  - #ADL2021
- TA Team
  - Forum discussion (preferred)
  - Email QA
  - TA recitation/hours



- 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



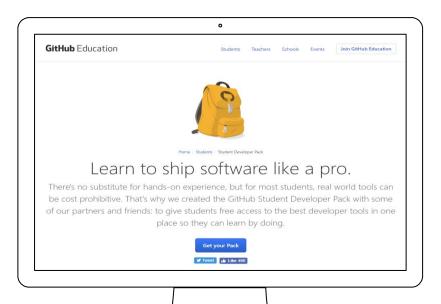




Please consider your available resources for taking this course

#### **GitHub Student Pack**

- The <u>student plan</u> provides unlimited private repositories
  - make your assignments private before the due date
  - make them public afterwards



## **Grading Policy**

- 3 Individual Assignment: 20% x 3 = 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: 30%
  - GitHub code, Project document
    - Bonus points for the outstanding work
  - Final presentation (format TBA)
- Participation: 10%
  - 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
  - Project Report & Code
    - Wrap-up project report
    - GitHub code submission w/ README



The project details will be announced later

## **How to Get the Registration Code?**

- Limit: 120 students per course
  - 72 registered
- Requirements
  - Available GPU Resources
  - Programming skills
  - Finish HW0
  - Fill in the <u>Google Form</u>



深度學習及其應用

科目流水號:

加選授權碼:

授課教師: 陳縕儂

#### **Tentative Schedule**

Week	Topic	Assignment
1 2021/02/22	Course Logistics & Introduction	A0 – Pytorch Tutorial
2021/03/01	Break	
2 2020/03/08	NN Basics & Backpropagation	
3 2020/03/15	Word Representations + RNN	A1 – Summarization
4 2020/03/22	Attention	
5 2020/03/29	Word Embeddings + ELMo	
2020/04/05	Break	
6 2020/04/12	Transformer + BERT	A2 – BERT
2020/04/19	Midterm Break	
7 2020/04/26	More BERT	
8 2020/05/03	RL Intro + Basic Q-Learning	
9 2020/05/10	Policy Gradient + Actor-Critic	A3 – NLG
10 2020/05/17	Natural Language Generation	
11 2020/05/24	Special Topic: Conversational Al	Final Project
12 2020/05/31	TBA	
13 2020/06/07	TBA	
2020/06/14	Break	
14 2020/06/21	Final Project Presentation	

## **Teaching Assistant Team**



#### Rules



Asking online questions is encouraged!!

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





Attending TA hours!! (details TBA)



# -Thanks!

# Any questions?

You can find the course information at

- http://adl.miulab.tw
- <u>adl-ta@csie.ntu.edu.tw</u>
- slido: #ADL2021
- YouTube: Vivian NTU MiuLab