

A stylized illustration of a row of books on a shelf. The books are in various colors (white, red, blue, orange) and some have decorative patterns like stripes or a diamond. They are arranged on a thick orange shelf against a light blue background.

2018 Asia University AI Summer Program (Day1-July3) A: Course Opening

Frank Hsueh-Ting Chu

Content

- Welcome Speech by Dr. Nien-Dean of the College
- Introduce teachers and teaching assistants
- Self introduction of students
- Tea break
- Course overview/structure of course
- Assessment
- Resource and tools



Teachers and teaching assistants

Chairperson

- Wen-Chung Shih

Teachers

- Frank Chu
- Charles Wang

Teaching assistants

- Wayne
- Joanna
- Yvonne



Students

| | | | | |
|----|---------------------------|---|-----------|----------------|
| 1 | Amelia Lita | F | Indonesia | AirlanggaU艾爾朗加 |
| 2 | Abhik Sarkar | M | Indian | Vel Tech |
| 3 | Ranjan Jyoti Das | M | Indian | Vel Tech |
| 4 | Danturti Akhil | M | Indian | Vel Tech |
| 5 | Vishal Chauhan | M | Indian | Vel Tech |
| 6 | Pooneet Chopra | M | Indian | Vel Tech |
| 7 | Gaurang Jain | M | Indian | Vel Tech |
| 8 | Sayan Mitra | M | Indian | Vel Tech |
| 9 | Sonal Singh | F | Indian | Vel Tech |
| 10 | Aravind Menon | M | Indian | Vel Tech |
| 11 | Mr. Harish Vakela Ramesh | M | Indian | Vel Tech |
| 12 | Ajit Sundaresh Umashankar | M | Indian | SRM University |
| 13 | Ashik Khaleel | M | Indian | SRM University |
| 14 | Ashwin Subramanian | M | U.S.A. | SRM University |
| 15 | Dhariya Sharath Asthana | M | Indian | SRM University |
| 16 | Govardhanan Indiran | M | Indian | SRM University |
| 17 | Gutha Sumith Reddy | M | Indian | SRM University |
| 18 | Hardik Ajmani | M | Indian | SRM University |

| | | | | |
|----|-----------------------------|---|-----------|----------------|
| 19 | Hussain Qutbuddin Poonawala | M | Indian | SRM University |
| 20 | Niladri Shekhar Dutt | M | Indian | SRM University |
| 21 | Puru Sharma | M | Indian | SRM University |
| 22 | S Hariharan Subramanian | M | Indian | SRM University |
| 23 | Sanyam Bhutani | M | Indian | SRM University |
| 24 | Siddharth Balaji Mahalingam | M | Indian | SRM University |
| 25 | Shivam Bajaj | M | Indian | SRM University |
| 26 | Tanuj Raj | M | Indian | SRM University |
| 27 | Thoudam Vivekananda Singh | M | Indian | SRM University |
| 28 | V Pavan Kailash Sreevatsan | M | Indian | SRM University |
| 29 | Sajan Kumar | M | Indian | SRM University |
| 30 | SIM XIN FENG | F | Singapore | NTU南洋理工 |
| 31 | WEI, QUINYUN 韋慶雲 | F | China | NTU南洋理工 |
| 32 | Adipong Chantakad | M | Thailand | CMU清邁大學 |
| 33 | Chalermpong Suinta | M | Thailand | CMU清邁大學 |
| 34 | Kanokwan Panpuang | F | Thailand | CMU清邁大學 |
| 35 | Chananchida Billa | F | Thailand | PSU宋卡拉王子 |
| 36 | Patipat Rattanapan | M | Thailand | PSU宋卡拉王子 |
| 37 | Pongsapak Keawyarat | M | Thailand | PSU宋卡拉王子 |

Tea break



Course overview

- | | |
|--|----------------|
| 1. Orientation & Introduction of Asia University | 3 hours (7/3) |
| 2. Course Opening and Introduction | 3 hours (7/3) |
| 3. AIY and AI Cloud Service | 6 hours (7/4) |
| 4. Python basics | 6 hours (7/5) |
| 5. Machine learning & scikit-learn | 6 hours (7/6) |
| 6. Deep learning & TensorFlow | 6 hours (7/9) |
| 7. Image processing and face recognition | 6 hours (7/10) |
| 8. Deep learning with big data | 6 hours (7/11) |
| 9. AI Project Development | 6 hours (7/12) |
| 10. Final presentation | 3 hours (7/13) |
| 11. Farewell Party | 3 hours (7/13) |



Schedule

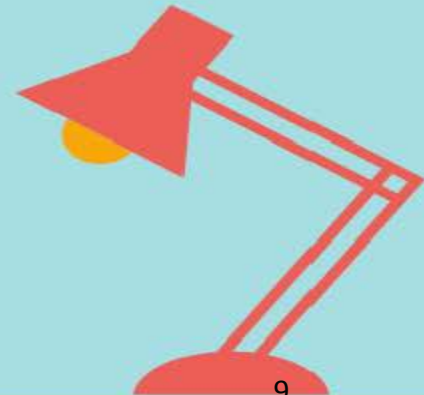
| | Sun (7/1) | Mon (7/2) | Tue (7/3) | Wed (7/4) | Thu (7/5) | Fri (7/6) | Sat (7/7) |
|-------------|-----------|------------------------------|---|--------------------------------|------------------|---------------------------------------|---|
| 08:10-09:00 | | | | | | | |
| 09:10-10:00 | | Welcome at the Airport | Orientation & Introduction of Asia University | AIY and AI Cloud Service | Python basics | Machine learning & scikit-learn | Taichung IT company visit and tour |
| 10:10-11:00 | | | | | | | |
| 11:10-12:00 | | | Lunch | Lunch | Lunch | Lunch | |
| 12:10-13:00 | | | | | | | |
| 13:10-14:00 | | | Course Opening and Introduction | AIY and AI Cloud Service | Python basics | Machine learning & scikit-learn | |
| 14:10-15:00 | | | | | | | |
| 15:10-16:00 | | | | | | | |

| | Sun (7/8) | Mon (7/9) | Tue (7/10) | Wed (7/11) | Thu (7/12) | Fri (7/13) | Sat(7/14) |
|-------------|---|------------------|---------------------|-----------------------------------|---------------------------|-----------------------|-------------------------------|
| 08:10-09:00 | | | | | | | |
| 09:10-10:00 | Taipei IT company visit and tour | Deep learning | Image processing | Deep learning with big data | AI Project Development | Final presentation | Farewell at the Airport |
| 10:10-11:00 | | | | | | | |
| 11:10-12:00 | | Lunch | Lunch | Lunch | Lunch | | |
| 12:10-13:00 | | | | | | | |
| 13:10-14:00 | | TensorFlow | Face recognition | Deep learning with big data | AI Project Development | Farewell Party | |
| 14:10-15:00 | | | | | | | |
| 15:10-16:00 | | | | | | | |



Tours

- 7/7 Taichung city tour
 - Earthquake Museum of Taiwan
 - National Museum of Natural Science
 - National Taiwan Museum of Fine Arts
- 7/8 Taipei city tour
 - Taipei World Trade Center (AI & Smart Living Expo)
 - Taipei 101 (Skyscraper)



Taichung City Tour



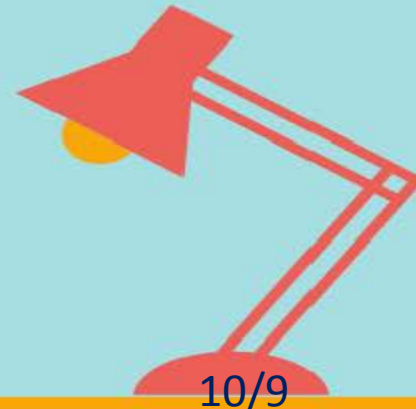
Earthquake Museum of Taiwan



National Museum of Natural Science



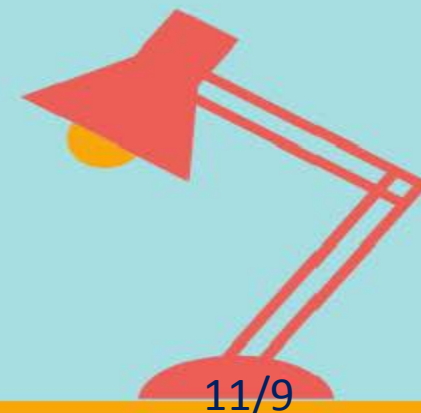
National Taiwan Museum of Fine Arts





Asia University

Kuang-Fu Junior high
and Elementary School



1999 Jiji earthquake (the 921 earthquake)



Old Kuang-Fu Junior high School



1999 Jiji earthquake (the **921** earthquake)

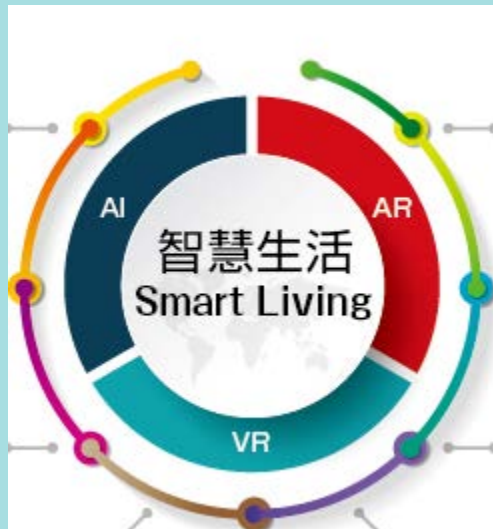
https://en.wikipedia.org/wiki/1999_Jiji_earthquake

We plan to visit the new campus at 16:00 on 7/9.



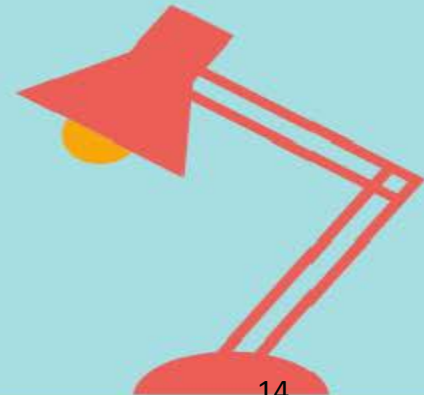
New Kuang-Fu Junior high School

Taipei Tour



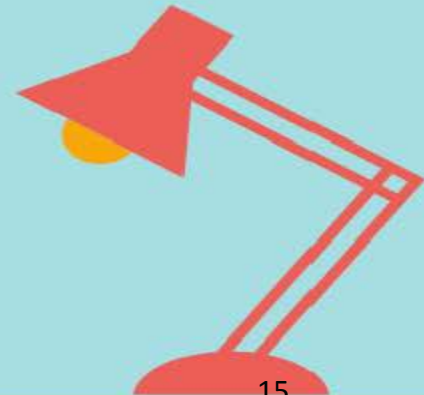
Structure of course

- Three hours in a topic
- The first lesson is lecture
- The second lesson is demo class
- The third lesson is practice class



Assessment

- Topic assignments
- Your github repository
- Final project presentation



Online Tools

<http://summer.aiplab.net/>

[AU AI Summer Program](#) [Fast Links](#)

Hi, guys.

Here are links of course online tools.

[Facebook-course group](#)

[Gitbook-student manual](#)

[Google Colaboratory](#)

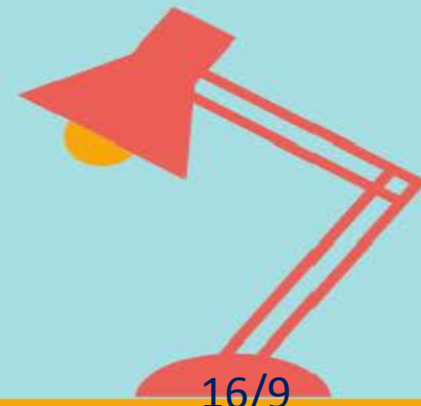
[Github-daily assignment](#)

[Googleform-Course evaluation form](#)

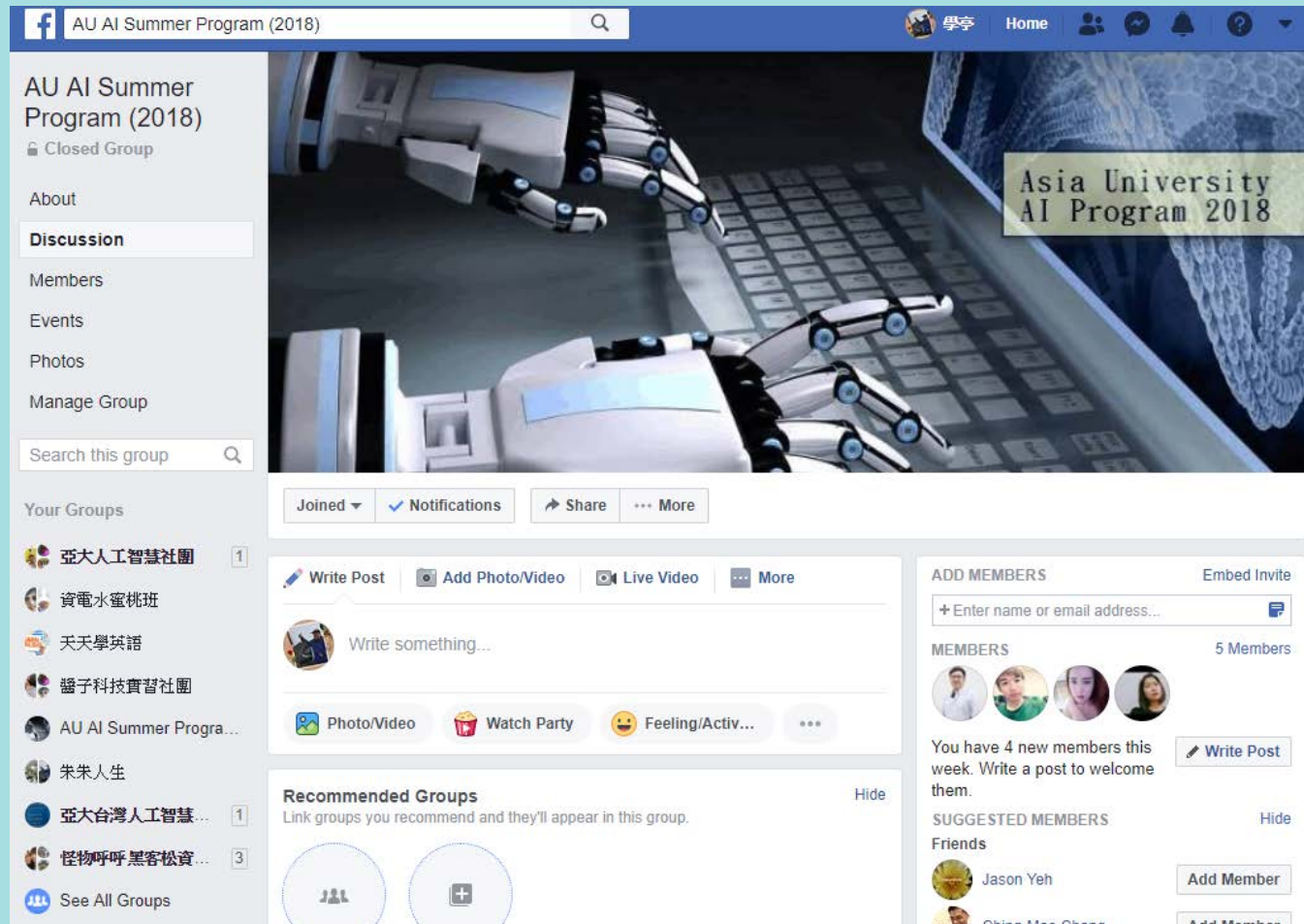
[Download Git\(Git-2.18.0-64-bit.exe\)](#)

[Download Anaconda 5.2\(Anaconda3-5.2.0-Windows-x86_64.exe\)](#)

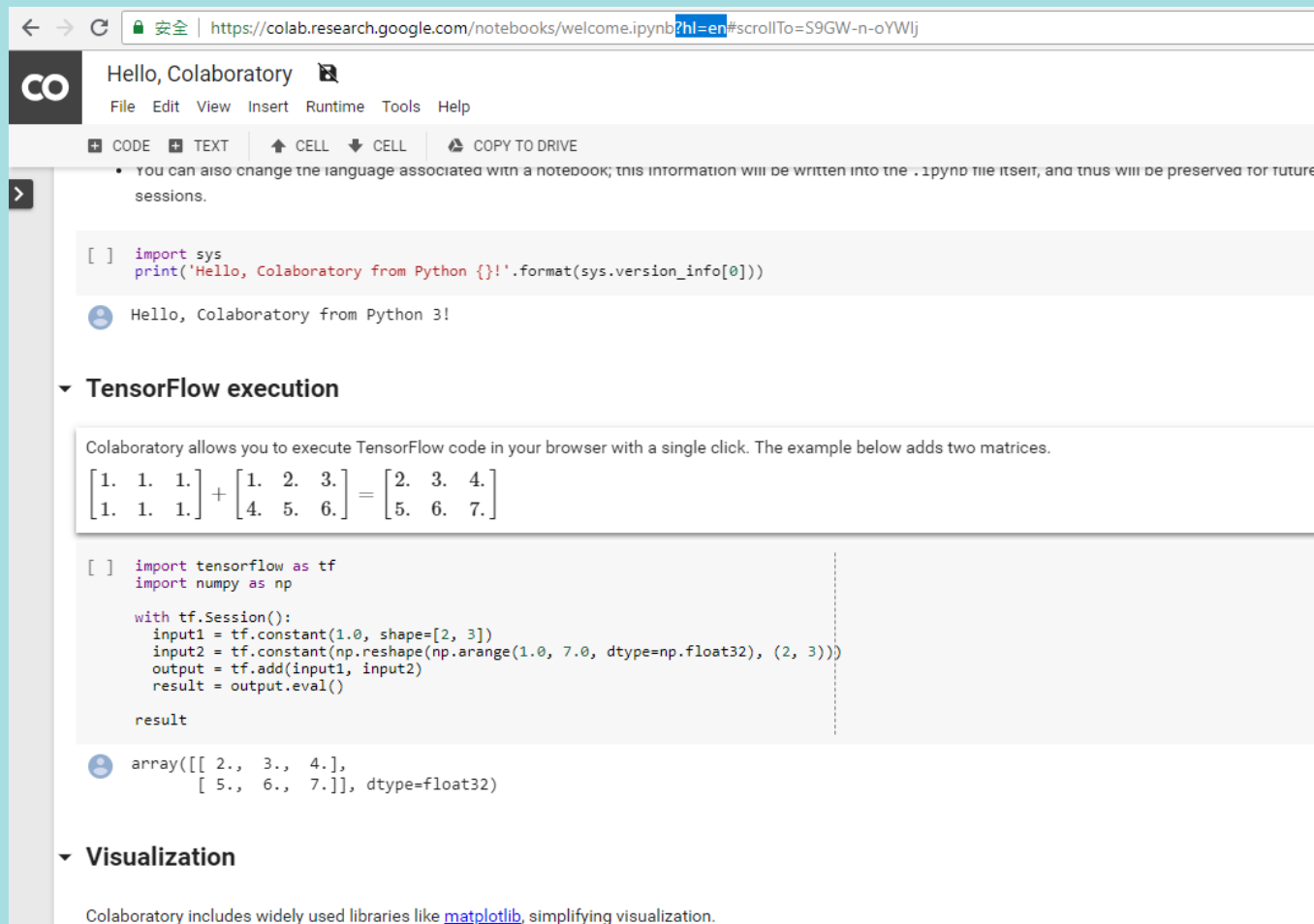
[Download Visual Studio Code1.24\(VSCoDeSetup-x64-1.24.1.exe\)](#)



Facebook and Line groups



Google colab



The screenshot shows the Google Colaboratory web interface. At the top, the browser address bar displays the URL `https://colab.research.google.com/notebooks/welcome.ipynb?hl=en#scrollTo=S9GW-n-oYWlj`. The page header includes the Google Colaboratory logo and a navigation menu with options like File, Edit, View, Insert, Runtime, Tools, and Help. Below the header, there are tabs for CODE, TEXT, and a section for managing cells (CELL, COPY TO DRIVE). A message states: "You can also change the language associated with a notebook; this information will be written into the .ipynb file itself, and thus will be preserved for future sessions."

The first code cell contains the following Python code:

```
[ ] import sys
print('Hello, Colaboratory from Python {}'.format(sys.version_info[0]))
```

The output of this cell is: "Hello, Colaboratory from Python 3!"

Below the first cell, there is a section titled "TensorFlow execution". It contains a text block explaining that Colaboratory allows executing TensorFlow code in the browser with a single click. An example is provided showing the addition of two matrices:

$$\begin{bmatrix} 1. & 1. & 1. \\ 1. & 1. & 1. \end{bmatrix} + \begin{bmatrix} 1. & 2. & 3. \\ 4. & 5. & 6. \end{bmatrix} = \begin{bmatrix} 2. & 3. & 4. \\ 5. & 6. & 7. \end{bmatrix}$$

Below the matrix equation, there is a code cell with the following TensorFlow code:

```
[ ] import tensorflow as tf
import numpy as np

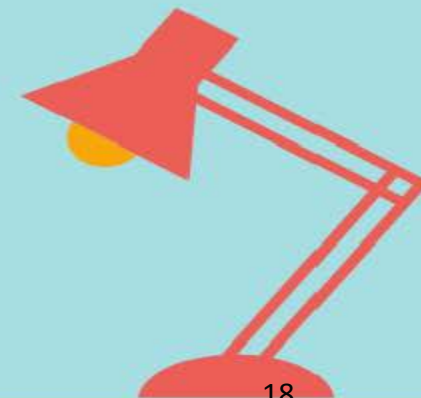
with tf.Session():
    input1 = tf.constant(1.0, shape=[2, 3])
    input2 = tf.constant(np.reshape(np.arange(1.0, 7.0, dtype=np.float32), (2, 3)))
    output = tf.add(input1, input2)
    result = output.eval()

result
```


The output of this cell is: `array([[2., 3., 4.], [5., 6., 7.]], dtype=float32)`

Below the TensorFlow section, there is a section titled "Visualization". It contains a text block explaining that Colaboratory includes widely used libraries like [matplotlib](#), simplifying visualization.

?hl=en



Google Account



Create your Google Account

to continue to Gmail

First name

Last name


Username

@gmail.com

You can use letters, numbers & periods

Password


Confirm password



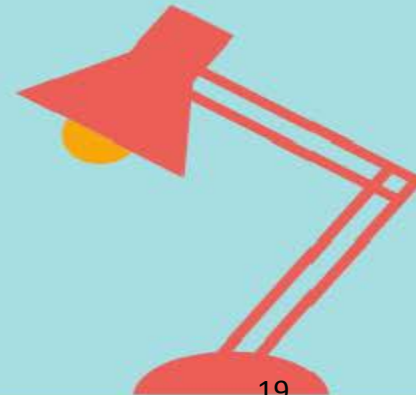
Use 8 or more characters with a mix of letters, numbers & symbols

[Sign in instead](#)

NEXT



One account. All of Google working for you.



Github

Welcome to GitHub

You've taken your first step into a larger world, @htchuhk.



Completed

Set up a personal account



Step 2:

Choose your plan



Step 3:

Tailor your experience

Choose your personal plan



Unlimited public repositories for free.



Unlimited private repositories for \$7/month. [\(view in TWD\)](#)

Don't worry, you can cancel or upgrade at any time.

☐ Help me set up an organization next

Organizations are separate from personal accounts and are best suited for businesses who need to manage permissions for many employees.

[Learn more about organizations](#)

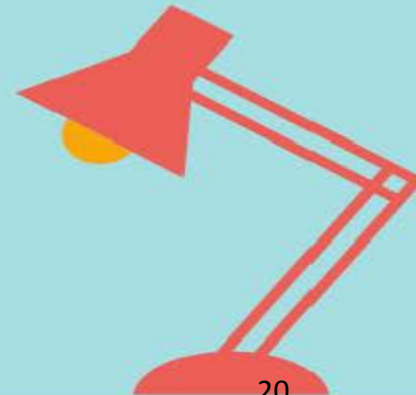
☐ Send me updates on GitHub news, offers, and events

Unsubscribe anytime in your email preferences. [Learn more](#)

Continue

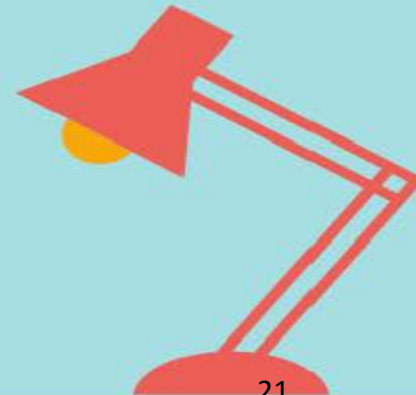
Both plans include:

- ✓ Collaborative code review
- ✓ Issue tracking
- ✓ Open source community
- ✓ Unlimited public repositories
- ✓ Join any organization



Assignment 1A

- Step 1: Clone the teacher's github repository
 - <https://github.com/htchu/AUAISSummer2018>
- Step 2: Open colab and create a new notebook
 - <https://colab.research.google.com>
- Step 3: Edit the notebook with text cells
 - <https://guides.github.com/features/mastering-markdown/>
- Step 4:
 - Rename the notebook: Untitled.ipynb->day1a.ipynb
 - Copy the notebook to GitHub
 - Check the notebook on GitHub



Clone the teacher's github repository


Import your project to GitHub

Import all the files, including the revision history, from another version control system.

Your old repository's clone URL

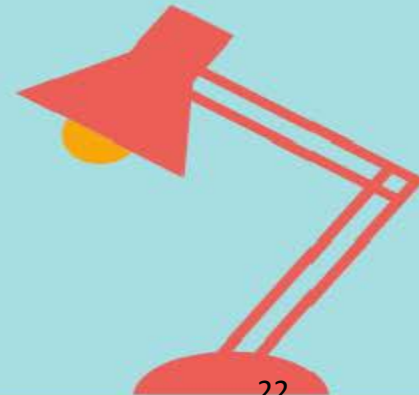
Learn more about the types of [supported VCS](#).

Your new repository details

| Owner | Name |
|--|--------------------|
|  htchuhk ▾ | / AUAISummer2018 ✓ |

Privacy

❗ Your new repository will be **public**. In order to make this repository private, you'll need to [upgrade your account](#).





Thanks!

Q&A

