

CISC6000 Deep Learning Kaggle Classroom Environment (KCE)

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HW Environment and Submission

Kaggle Classroom Environment: KCE

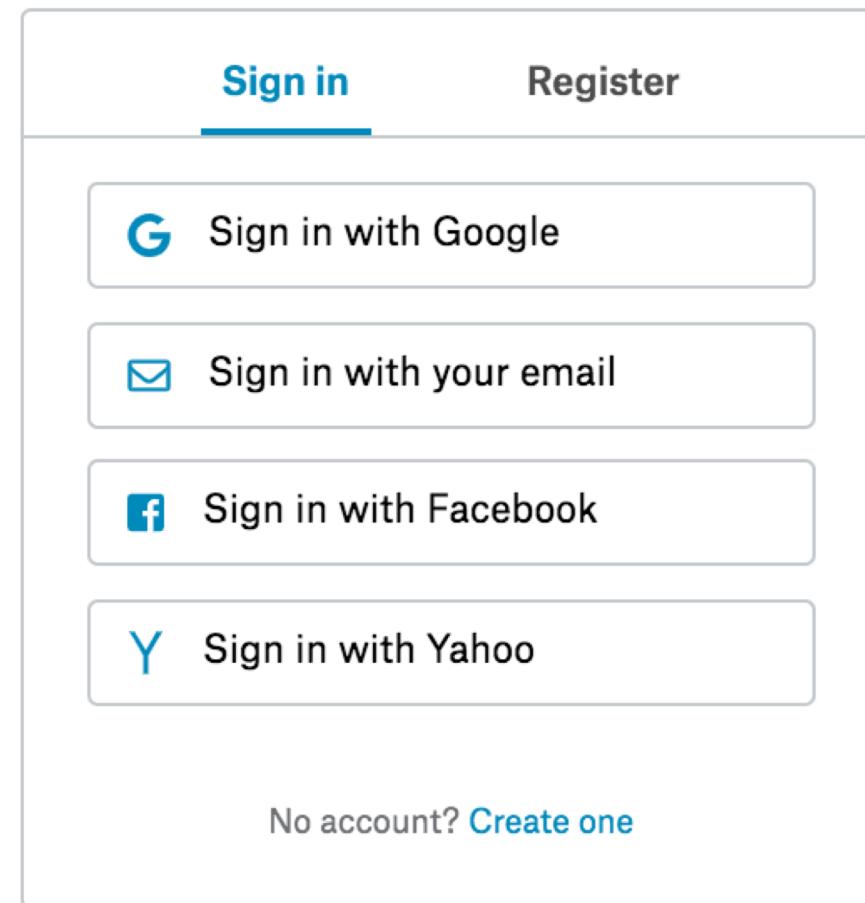
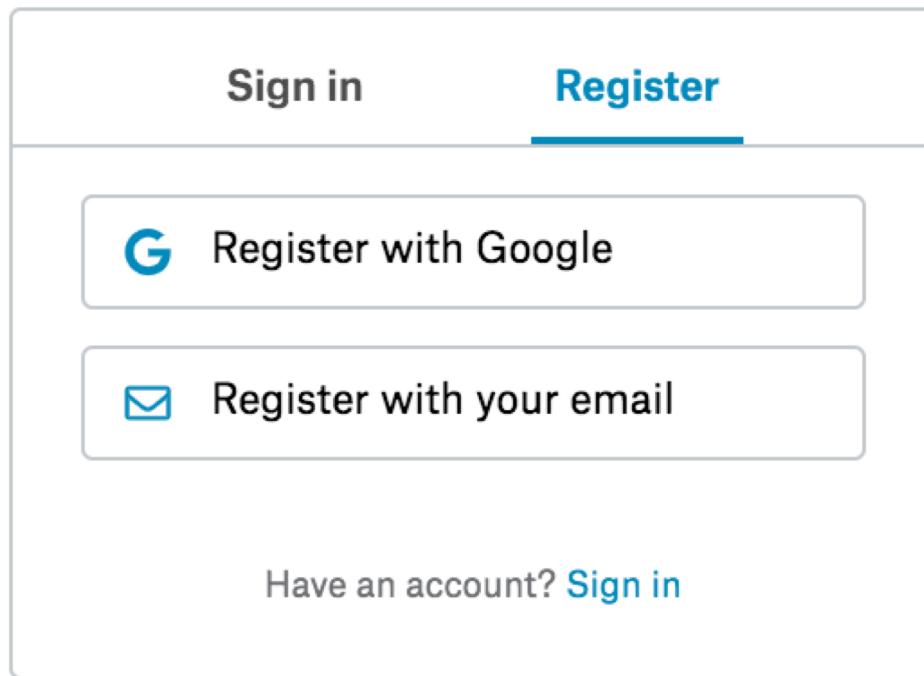


Each assignment file (posted in Bb) will contain a link to its KCE instance:
HW1: <https://www.kaggle.com/competitions/cisc6000-deep-learning-hw1>

A screenshot of a Kaggle competition page. The header features the Kaggle logo and a "Community Prediction Competition" badge. The main title is "CISC6000 Deep Learning HW1" with the subtitle "FCNN modeling in MNIST". A timer indicates "a month to go". The page includes navigation links for "Overview", "Data", "Code", "Discussion", "Leaderboard", and "Rules", along with a prominent "Join Competition" button and an ellipsis menu icon.

Setup KCE

- 1. Register with Kaggle**
- 2. Join “Competition” (one competition per HW)**



Inside KCE



Community Prediction Competition

CISC6000 Deep Learning HW1

FCNN modeling in MNIST

a month to go

[Overview](#) [Data](#) [Code](#) [Discussion](#) [Leaderboard](#) [Rules](#) [Team](#) [Host](#)

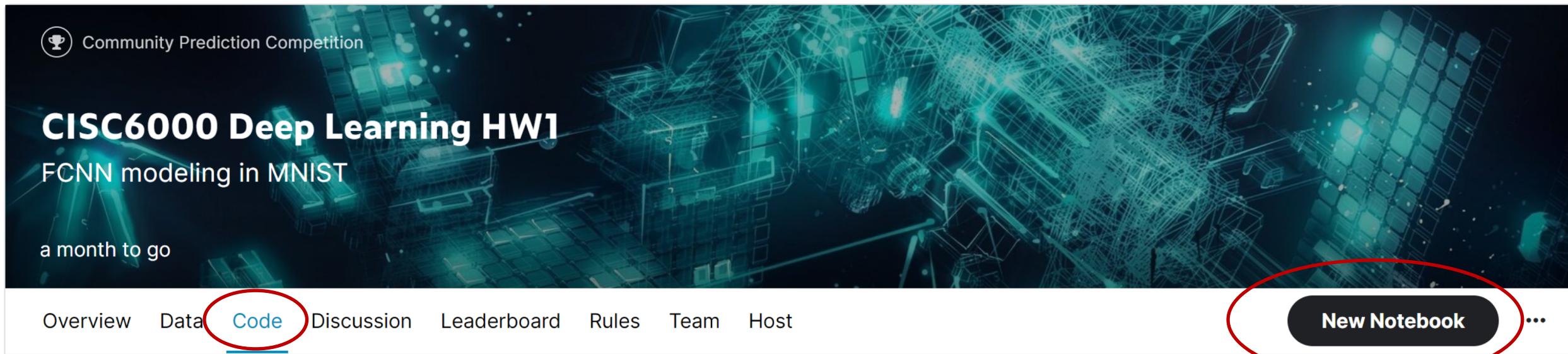
[My Submissions](#)

[Submit Predictions](#)

...

- **Data:** data files for each assignment. Also posted in Bb as a zip file.
- **Code:** where you will do your coding work.
- **Discussions:** works like Piazza.
- **Leaderboard:** You can see how your peers are doing. **We are not grading according to ranks!!!**
- **Rules:** Rules you should follow for the HW assignments. Also specified in the HW assignments.

Notebooks



Community Prediction Competition

CISC6000 Deep Learning HW1

FCNN modeling in MNIST

a month to go

Overview Data [Code](#) Discussion Leaderboard Rules Team Host

New Notebook

...

A screenshot of a competition landing page for "CISC6000 Deep Learning HW1". The page features a dark blue header with the word "Notebooks" in white. Below the header is a large banner with a futuristic cityscape background. On the left side of the banner, there's text about a "Community Prediction Competition" and a trophy icon. The main title "CISC6000 Deep Learning HW1" is prominently displayed in large white letters, followed by the subtitle "FCNN modeling in MNIST". A timer indicates "a month to go". Below the banner is a navigation bar with links: Overview, Data, Code, Discussion, Leaderboard, Rules, Team, Host. The "Code" link is underlined and circled in red. To the right of the navigation bar is a large, dark button with the text "New Notebook" in white. This button is also circled in red. At the far right end of the navigation bar, there's an ellipsis (...).

Notebooks

The screenshot shows a Jupyter Notebook interface with the following details:

- Left Sidebar:** Contains icons for file operations (New, Open, Save, etc.) and a code editor.
- Title Bar:** Displays "notebook757d208c96".
- Top Menu:** File, Edit, View (selected), Run, Add-ons, Help.
- View Menu Submenu:** A dropdown menu with the following options:
 - Toggle line numbers
 - Toggle output scrolling
 - Toggle word wrap
 - Toggle corgi mode
 - Collapse all code cells
 - Expand all code cells
 - Hide cell from viewers
 - Editor Theme** (highlighted with a red circle)
- Code Cell Content:** Python code for listing filenames in a directory.

```
for filename in filenames
    print(os.path.join(directory, filename))
```
- Code Cell Output:** Text output from the code cell.
- Right Sidebar:** Shows "Code" and "Session" tabs.

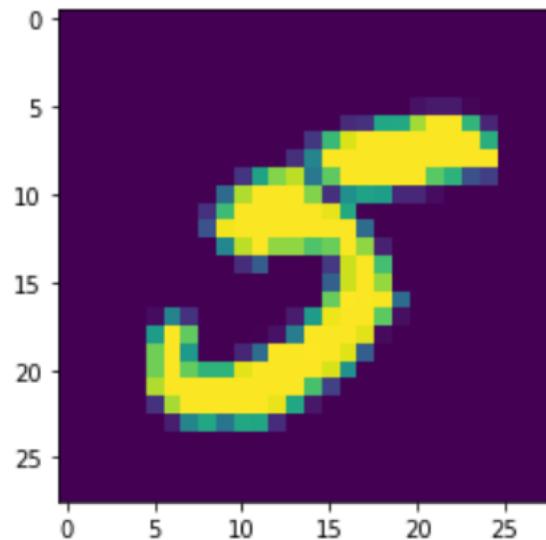
Notebooks

[7]:

```
import numpy as np
x_train = np.load('/kaggle/input/cisc6000-deep-learning-hw1/mnist.train.npy')
```

[8]:

```
import matplotlib.pyplot as plt
plt.imshow(x_train[0])
plt.show()
```



Notebooks

Share | Save Version 0 | >|

H D C P R A M | Power | Refresh

*lytics libraries installed
s://github.com/kaggle/docker*

```
g. pd.read_csv)  
  
nput/" directory  
g Shift+Enter) will list a
```

Data + Add data ▾

Settings ▾

Language Python ▾

Environment Preferences

Accelerator None ▾

Internet

Code Help ▾

Find Code Help

Search for examples of how to do things

```
aggle/working/) that gets
```

Accelerator

Turning on GPU will reduce the number of CPUs available and will only speed up image processing and neural networks.

Availability is limited to 42 hours this week. Quota resets weekly with a minimum 30 hours provided. You have 41 hours remaining.

[Cancel](#)

[Turn on GPU](#)

Notebooks



```
import pandas as pd  
df = pd.read_csv('/kaggle/input/cisc6000-deep-learning-hw1/sample_submission.csv')  
df.head()
```

[6]:

	id	class
0	1	7
1	2	4
2	3	3
3	4	5
4	5	7

Create Submission File

In[21]:

```
submission['class'] = pred
submission.to_csv('submission1.csv')
submission.head()
```

Your predictions

Out[21]:

	id	class
0	1	0
1	2	1
2	3	2
3	4	3
4	5	4

Code

Modeldown

Commit Code

The screenshot shows a Jupyter Notebook interface with the following elements:

- Title Bar:** "notebookef8f7d21e0"
- Header:** File, Edit, View, Run, Add-ons, Help
- Toolbar:** +, Delete, Cut, Copy, Paste, Run, Run All, Code dropdown, Draft Session (1m), Data, Add data
- Code Cell:** [1]:

```
# This Python 3 environment comes with many helpful analyti
```
- Buttons:** Share, Save Version (circled in red), 0
- Side Panel:** Settings, Languages, Python

Commit Code

The screenshot shows a Jupyter Notebook interface. At the top, there's a 'Share' button and a 'Save Version' button with the number '2'. Below these are buttons for 'Draft Session (6m)' and a commit history summary: H D C P R A M. A red circle highlights the 'Show versions' button, which is part of a dropdown menu. The main content area displays a message about analytics libraries and a link to a GitHub Dockerfile.

helpful analytics libraries installed
image: <https://github.com/kaggle/docker-python>

Version History

The 'Version History' panel shows two versions: Version 2 (3m ago) and Version 1 (8m ago). Version 1 has a context menu open, with the 'Compare version' option highlighted by a red circle. The menu also includes 'Open in Viewer', 'Revert to version', 'Pin as default version', and 'Edit version name'.

Version	Time Ago	Actions
Version 2	3m ago	Save & Run All • Diff: +0 -0 Ran in 16 seconds
Version 1	8m ago	Save & Run All • Diff: +21 -0 Ran in 25 seconds

- Open in Viewer
- ↻ Revert to version
- 🔔 Pin as default version
- ✎ Edit version name
- View logs
- Compare version

Commit Code

Select version to compare

X

Version 2

6m ago

Save & Run All • Diff: +0 -0

Ran in 16 seconds

Version 1

11m ago

Save & Run All • Diff: +21 -0

Ran in 25 seconds

Commit Code

The screenshot shows a Jupyter Notebook interface with a blue header bar containing the title "Commit Code". Below the header is a navigation bar with icons for file operations, followed by the notebook name "notebookef8f7d21e0" and a message "Draft saved". The main area displays a portion of a notebook cell with code and text. On the left, a vertical toolbar has several icons: a gear, a plus sign, a trophy, a downward arrow, a double arrow, a speech bubble, a graduation cap, and a downward arrow. A red oval highlights the "File" icon in the top-left corner of the menu bar. The "File" menu is open, showing the following options:

- New Notebook
- Upload Notebook
- Download Notebook** (highlighted with a red oval)
- Upgrade to Google Cloud AI Notebooks
- Set as Utility Script
- Add or upload data
- Add utility script
- Language ▾
- Editor Type ▾
- Share
- Version history

Summary

Training and Test:

1. Create a new notebook.
2. Write your code.
3. Train your models using the provided training data.
4. Test your best model on the provided test data (no labels).
5. Save your work as you progress using version controls.

Note: Modify the setting of “Accelerator” to enable GPU. Turn off the GPU when not needed.

Submission:

1. Save the test output to a csv file.
2. Download the csv files from /kaggle/working directory (on the right side of interface) to your local laptop.
3. Submit the csv file from your local laptop to Kaggle. You will see your prediction accuracy on the Leaderboard.
4. Zip all files (code and csv) and submit them to Blackboard.