

Exercise Submission System

Exercises: Schedule

Exercise 01: Organization
Exercise 02: Math Recap

Intro

- Exercise 03: Dataset and Dataloader
- Exercise 04: Solver and Linear Regression
- Exercise 05: Neural Networks
- Exercise 06: Hyperparameter Tuning

Numpy (Reinvent the wheel)

Exercise 07: Introduction to Pytorch
Exercise 08: Autoencoder

Pytorch/Tensorboard

Exercise 09: Convolutional Neural Networks

Exercise 10: Semantic Segmentation

Exercise 11: Recurrent Neural Networks

Applications (Hands-off)

Exercises: 8 Submissions

- Exercise 03: Dataset and Dataloader
- Exercise 04: Solver and Linear Regression
- Exercise 05: Neural Networks
- Exercise 06: Hyperparameter Tuning

Numpy (Reinvent the wheel)

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Applications (Hands-off)

Exercises: Submissions & Bonus

- Starting from exercise 3:
 - practical exercises, labeled as **submissions**
 - Disclaimer:
 - submissions have a fixed due date until they have to be solved and successfully uploaded.
 - No exceptions
- If you pass 7/8 submission you will receive a -0.3 bonus on the exam grade

Submission Overview

- Every exercise has maximal one submission
- Every submission has a submission goal, e.g.,
 - Goal: Implement a sigmoid function
 - Reachable points [0, 100]
 - Threshold to clear exercise: 100
 - Submission start: <date>
 - Submission deadline: <date>

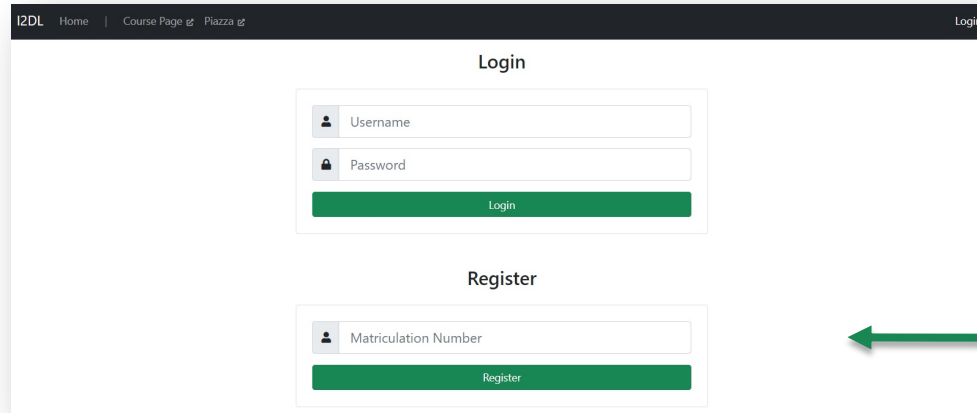
Python Setup

- New users: install python3.7
 - **README.md**
- “Advanced” users:
 - Virtual environment via [anaconda](#)/whatever
 - Regular system python install in this environment
 - **`pip install -r requirements.txt`**

New python users: <http://nbviewer.jupyter.org/github/jrjohansson/scientific-python-lectures/blob/master/Lecture-1-Introduction-to-Python-Programming.ipynb>

How to submit exercises

- Register at our [submission webpage](https://i2dl.vc.in.tum.de) (i2dl.vc.in.tum.de)
 - Sign up with valid matriculation number
 - Get **username** and **password** to your TUM email address
 - Un-enrolled TUM students and LMU students: fill the following [form](#) to request a user



The screenshot displays the i2DL submission webpage interface. At the top, a navigation bar includes links for 'Home', 'Course Page', and 'Piazza', along with a 'Login' button. The main content area is divided into two sections: 'Login' and 'Register'. The 'Login' section contains a 'Username' input field, a 'Password' input field, and a green 'Login' button. The 'Register' section contains a 'Matriculation Number' input field and a green 'Register' button. A green arrow originates from the right side of the slide and points towards the 'Register' button.

How to submit exercises

- Submit models:
 - Upload created **zip** file (not .7z or other formats)
 - Note: You will submit your whole code folder as well as your trained models (there are file limits)

The screenshot displays the 'Exercise submission' page. At the top, the title 'Exercise submission' is centered. Below it, a blue header bar contains 'Exercise 1 [Optional]' and an upward arrow. The main content area is divided into two sections: 'Info' and 'Upload'. The 'Info' section lists details: Description: Test the system, Start: 2021-04-22 13:00:00, Deadline: 2021-04-28 15:59:59, and Requirement: 60.0. The 'Upload' section features a file selection interface with a 'Choose File' button, a text field showing 'No file chosen', and an 'Upload' button. A red arrow points to the 'Upload' button. A tooltip with an exclamation mark icon and the text 'Please select a file.' is visible near the bottom right of the upload area. Another red arrow points to the 'Info' section.

Exercise submission

Exercise 1 [Optional]

Info

- Description: Test the system
- Start: 2021-04-22 13:00:00
- Deadline: 2021-04-28 15:59:59
- Requirement: 60.0

Upload

Choose File No file chosen








Upload

Please select a file.

How to submit exercises

- Wait for the email with your score or refresh the page
 - Uses email that you signed up with
 - In case of error, read the email

Your previous submissions




#	Date	Status	Passed?	Score	Download
1	2021/04/21 12:10:25	finished	✓	99.00	
14	2021/04/21 11:32:10	finished	✓	60.00	
15	2021/04/21 11:34:22	finished	✗	50.00	
16	2021/04/21 12:03:26	queued [cancel job]	✗	-	
19	2021/04/21 11:40:42	cancelled	✗	-	
20	2021/04/21 05:29:25	error	✗	-	
21	2021/04/21 05:28:24	submitted	✗	-	

Exercises FAQ

- I don't want to code in notebooks. Can I use my favourite IDE?
 - Yes
- Cool, so I can just change the whole code structure?
 - No
 - You can write any helper functions, but keep the skeleton classes intact (i.e., don't rename important functions or variables)
 - You will upload all files and those will be archived on our end

Threshold and Submission FAQ

- How do I know that I passed?
 - Once you submit a score that surpasses the threshold, you will receive an email that contains a message which tells you that you passed this submission

#	Date	Status	Passed?	Score	Download
1	2021/04/21 12:10:25	finished	✓	99.00	
14	2021/04/21 11:32:10	finished	✓	60.00	
15	2021/04/21 11:34:22	finished	✗	50.00	

- Help, I got this message a second time!?
 - You will receive this message every time you submit an exercise that exceeds the score

Threshold and Submission FAQ

- I submitted another model which was below the threshold. Do I have to resubmit the old model?
 - No, once one models surpasses the threshold, you are done with this submission (for the bonus)
- Is there a limit on how often I can submit?
 - You shouldn't be worried about it

Warnings

- Cheating & Plagiarism
 - All your code is uploaded and logged
 - Abusing the submission system will exclude you from the exercises and exam
- Only submit the necessary files, not the datasets (use the submission script to prepare the zip)
- Submit ahead of deadline, your job might be queued if many students submit in the same time

Copyright

- All lecture material, including the exercises is copyrighted
 - All rights reserved
 - Do not redistribute, do not share solutions
- May I use GitHub for the exercises?
 - Yes, but only as a private repository

Live Demo

Upcoming Lecture

- **Today:** Exercise 1 & 2 and Tutorial 1 & 2 released
- **Note:** Both Exercise 1 & 2 are options, but we encourage you to do them, especially Exercise 1 for setting up Python environment
- **Next lecture:** Lecture 3: Introduction to Neural Networks, Computational Graphs
- **Next Thursday:** Tutorial session 3: Dataset and Dataloader; Solutions to exercise 2

See you next week!