Introduction to Deep Learning (I2DL)

Organization

PhD Intro:
Andreas, Arvind, Yawar

Today's Outline

- Organizational: Andreas
  - Lecture Material
  - The team & how to contact us
  - Overview of practical exercises and dates & bonus system
  - Software and hardware stuff
  - FAQ
- Math Background I: Arvind

Website: https://niessner.github.io/I2DL/

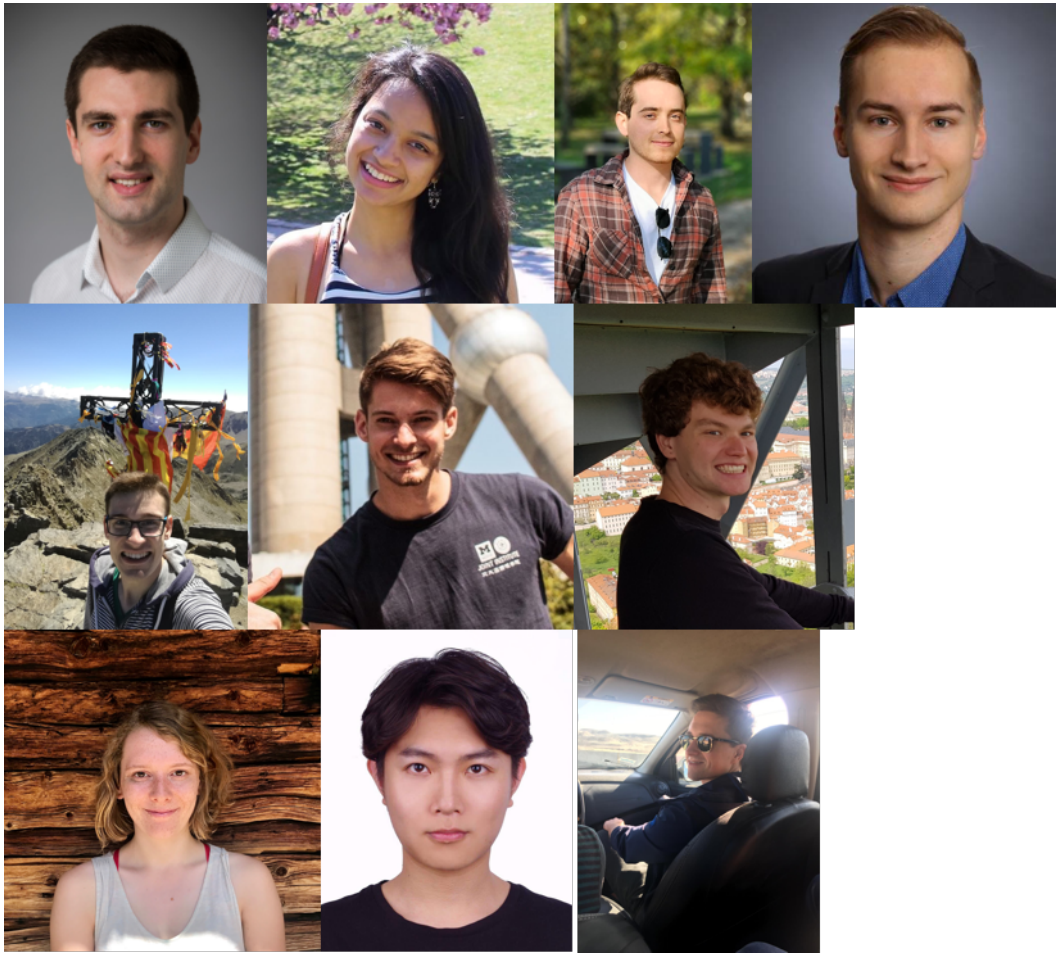
Lecture Material

- Slides
  - Slides will be uploaded before each lecture/exercise

- Recordings
  - Lectures & Exercises will be recorded and can be viewed on moodle starting with this session today (hopefully)

Student Tutors

- Altenberger Felix
- Aneja Shivangi
- Gafni Guy
- Hermann Pascal
- Kunze Julian
- Meissen Felix
- Van Hove Willem
- Wagner Sophia
- Shan Jiaqi
- Wolf Lucas



Online Contact

Content of lecture and exercises:

MOODLE

https://www.moodle.tum.de

Personal or organizational questions:

i2dl@googlegroups.com

Private emails or Moodle messages will not be answered!

Office Hours

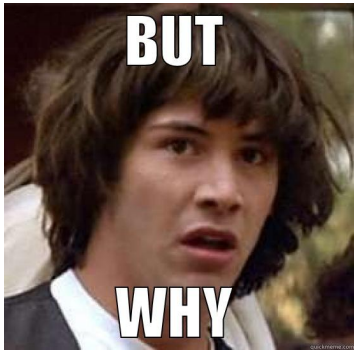
- Starting from: 04.11.19
- Location: 02.13.051
- Office hours (1 hour long each)
  - Monday: 13, 16
  - Tuesday: 10, 11
  - Wednesday: 9, 15
  - Thursday: 13
  - Friday: 11, 15

-> Use them!

Exercises - Schedule

- Time and Location:
  - Thursday, 10.15- 11.45 (ct.)
  - HS 1 (here)
- Upcoming schedule:
  - Now: Organization and Math Background I
  - 17.10.: Math Background II
  - 07.11.: Introduction to exercise system
    - More information on exercises in this session

Exercises – Why?



- Bonus
  - -0.3 on final grade
  - To achieve the bonus you need to **pass all but one submission (e.g., 6/7)**
- Practical experience
  - Exercises tasks are common interview questions when interviewing for a machine learning engineer related role
- Exam
  - Content of exercises will be relevant for the exam

-> More on exercises: 07.11.

Submissions - Overview

- S1 Linear classifiers
- S2 Two-Layer NN

Begin: 14.11.

End: 04.12. 18:00

- S3 Build your own DL library & Classification
- (S4 Regression for House Prices)

Begin: 05.12

End: 18.12. 18:00

- S5 Pytorch Clasification
- S6 Semantic Segmentation
- S7 Recurrent NN

Begin: 19.12.

End: 22.01. 18:00

Exercises - Submissions

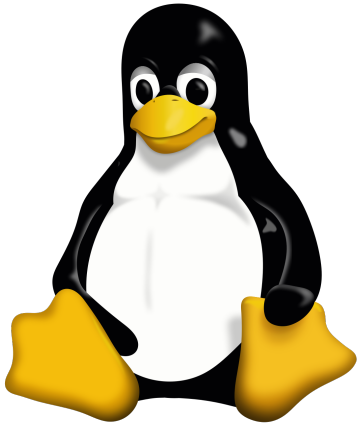
- 3 exercise dates
  - About two weeks time per exercise
  - Keep in mind that there is a long exercise in January
- 2-3 submissions per exercise
  - 6 or 7 submissions in total
  - Every submission has a threshold that you need to surpass to pass the submission
  - Threshold are easy to pass though there will be a student leaderboard where you can compete with each other

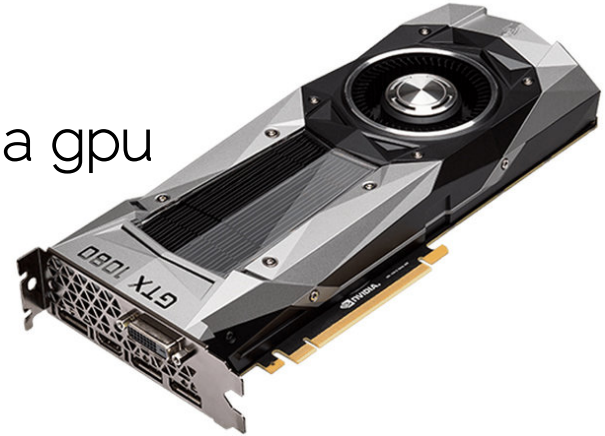
Exercise Disclaimer

- The exercise times and dates are fixed
  - The system is automatic and you will not receive your bonus if you fail to upload them in time
- Exercise 1 has 2 submissions
  - > you are ineligible to receive the bonus if you skip exercise 1

Software/Hardware

- Programming Language
  - Python
- Deep Learning Library
  - Pytorch
- Hardware
  - A simple cpu will do
  - For exercise 3 or DL in general: Nvidia gpu





FAQ

- When is the exam?
  - We have no idea right now but we will publish the date as soon as we know about it
- Will there be a retake exam?
  - Not in this semester
  - This class is offered every semester so you will have to pass the exam in the upcoming semester

FAQ

- What about the bonus?
  - Bonus will be transferred to next semester
  - This also applies to students who took this class in the previous semester

- Will there be an exercise session every week?
  - No, we publish every exercise session online and mention it at the end of every lecture

External Students

- If you are unable to register yourself at moodle yourself, please visit
  https://bit.ly/2OT27a4
  to sign up and we will add you to the forum

  (Link is also on our webpage
  https://niessner.github.io/I2DL/)

Questions?