Deep Learning: Summer term 2020

Note: These outlines and schedules are tentative and can be subject to change!
Current version is from Mai 2, 2020.

Lecture Outline and Content:

	Suggested "viewing" schedule
0. Introduction	20.04. – 24.04.
1. Feedforward neural networks	27.04. – 01.05.
2. Loss and Optimization	04.05. – 09.05.
3. Convolutional Neural Networks	11.05. – 15.05.
4. Regularization	18.05. – 22.05.
5. Common Practices	25.05. – 29.05.
6. Architectures	08.06. – 12.06. (Public holiday on 01.06)
7. Recurrent Neural Networks	15.06. – 19.06.
8. Visualization	22.06. – 26.06.
9. Reinforcement Learning	29.06. – 03.07.
10. Unsupervised Learning and Generative Adversarial Networks	06.07. – 10.07.
11. Segmentation and Object Detection	13.07. – 17.07.
12. Weakly Supervised Learning 13. Known Operator Learning	20.07. – 24.07.

Exercise Deadlines:

	Handout	Detailed Q&A*	Final Deadline**
0. Python and Numpy	20.04.		11.05. – 15.05.
1. Basic Framework and Fully Connected Layers	04.05.	11.05. – 15.05.	25.05. – 29.05.
2. Convolutional Neural Networks and Optimization	18.05.	02.06. – 08.06.	22.06. – 26.06.
3. Regularization and Recurrent Networks	02.06.	29.06. – 03.07.	13.07. – 17.07.
4. Image Classification with PyTorch	22.06.	20.07. – 24.07.	03.08. – 07.08.

* For exercises 1-4, we plan to provide pre-recorded presentations together with the materials so that you can start working on the tasks right away. During the Q&A time slots, only the most important concepts are covered – please send suggestions what you would like to see covered in more detail to the tutors mailing list in advance.

** We strongly encourage everyone to submit earlier.