



Praktikum (Deep) Representation Learning

The goal of this practical course is to develop state-of-the-art algorithms for different machine learning tasks. During the course you will learn about basic pre-processing methods, unsupervised and supervised classification using traditional and deep learning based techniques. They will be implemented and tested on different tasks, such as orca sound classification, document classification or retrieval.



Example Task: Orca Sound Classification.

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Example Task: Writer Identification

The course will cover the following topics:

- Signal processing/data augmentation
- Feature extraction
- Deep unsupervised feature learning
- Tradition vs. deep supervised learning
- Metric learning

Credits

• 5 ECTS

Requirements

Basic knowledge of image processing is desirable. Having visited lectures such as Introduction to Pattern Recognition (IntroPR) is beneficial but not necessary.

First Meeting / Lecture

Monday, 6h of May, 12:15h, Room 01.252-128, Cauerstr. 11

Contact and Further Information

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