

Machine Learning

Exercise 5: Principal Component Analysis

Prof. Dr. Thomas Kopinski

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Abstract

In this exercise you will learn how to use Principal Component Analysis (PCA) to extract meaningful information from a large dataset by reducing the dimension of the provided data.

Task 1: Understand the algorithm

- Further information about PCA in general as well as examples of python implementations can be found [here](#).
- Make sure you understand what PCA does and how it works.

Task 2:

- Follow the tutorial [here](#) for an installation to Anaconda
- [Here](#) you can get started with working with Anaconda and Launch your own Jupyter Notebooks
- Make sure to follow the whole guide and also work with the Anaconda prompt
- Generate a 'hello, world' output, either in a Notebook or in the prompt

Task 3:

- Combine both working environments to work with them together
- Inspect the repo - there are files in the `code/ntbks` folder
- Read, run and inspect the notebooks and files in the `01_intro` folder