SD Specialisation: Machine Learning

This specialisation enables you to

- Define the basic concepts and compute essential constructions of linear algebra and probability
- Apply the tools of linear algebra and probability to solve small mathematical problems such as solving systems of linear equations
- Model simple probabilistic problems
- Discuss, explain, and reflect upon central machine learning concepts and algorithms.
- Choose among and make use of the most important machine learning approaches in order to apply them to practical problems.
- Implement abstractly specified machine learning methods into computer programmes
- Combine and modify machine learning methods to analyse practical dataset and covey the results

Career Prospects

AI and machine learning have become key technologies in various fields. This specialisation aims at preparing you to apply for machine learning specialist or data science jobs in various industries. You are trained to use mathematical tools in problem solving and to implement different machine learning algorithms in practise with the reflection how the methods work that should help you in choosing and implementing effective solutions for practical problems.

Prerequisites

Students are expected to be fluent in programming, in foundations of mathematics, and in the basics of algorithms. In general, the specialisation requires willingness to work with mathematical concepts. It is advantage, but not a requirement, to have an undergraduate degree in mathematics, physics or engineering (with a significant math component).