

Introduction to Deep Learning (Part 3)

Wednesday 27 September 2023 09:00 (7h 30m)

This is an hands-on introduction to the first steps in Deep Learning, intended for researchers who are familiar with (non-deep) Machine Learning.

The use of Deep Learning has seen a sharp increase of popularity and applicability over the last decade. While Deep Learning can be a useful tool for researchers from a wide range of domains, taking the first steps in the world of Deep Learning can be somewhat intimidating.

We start with explaining the basic concepts of neural networks, and then go through the different steps of a Deep Learning workflow. Learners will learn how to prepare data for deep learning, how to implement a basic Deep Learning model in Python with Keras, how to monitor and troubleshoot the training process and how to implement different layer types such as convolutional layers.

Presenters: BAZAROVA, Alina; CEA, Donatella; CAMPI, Francesco; STEINBACH, Peter (HZDR); SCHMERLER, Steve (HZDR)

Session Classification: Course Package 10 (Helmholtz AI)