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Intermediate: Introduction to Deep Learning / day 1

Monday 19 September 2022 09:00 (8 hours)

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.

More information can be found here: https://carpentries-incubator.github.io/deep-learning-intro/

→ Register here ←

Maximum number of participants

20-25

Target audience

Any Academic Level

Previous experience

numpy ndarrays, fundamentals of classification - ideally participants will have already taken the Intoruction to Machine Learning course

Learning target

This introduction aims to cover the basics of Deep Learning in a practical and hands-on manner, so that upon completion, you will be able to train your first neural network and understand what next steps to take to improve the model

Presenter: STEINBACH, Peter (HZDR)

Session Classification: Workshops (Helmholtz AI)

Track Classification: Intermediate