

Introduction to Deep Learning and Tensorflow with Hands-on

Deep Learning is currently one of the most promising method for feature extraction from complex data.

In recent years, deep learning found broad applicability to a wide range of challenges in molecular dynamics and quantum chemistry fields, such as structure and property prediction, drug design, docking, and so on.

This lecture will introduce the basics of the method together with practical sessions with examples on simple feature extraction problems using the Tensorflow framework for deep learning.

This lecture will cover the following:

- Deep Learning and Neural Networks
- The Learning Process as an Optimization Problem
- Receipts for setting up your Deep Learning Lab
- An overview of Neural Networks classes and applications
- Hands on with Tensorflow framework