Crash Course on
Neural Networks for Applications in Physics

Feb 21 - Mar 02, 2021

School of Nano Science
Institute for Research in Fundamental Sciences (IPM)

Sadegh Raeisi

Department of Physics, Sharif University of Technology

Machine learning techniques and especially deep learning ones have attracted a lot of attention from the science community in recent years. In particular, in Physics, there are new papers posted on arXiv everyday that try to simplify or improve our understanding of the universe around us using these techniques. In this course, we plan to cover the basics of neural networks as one of the most powerful machine learning techniques. To this end, we will start with a brief introduction to the basics of machine learning followed by the basics of neural networks. Next we will explain how these models are trained. Finally, we will cover convolutional and recurrent neural networks as two of the most powerful types of neural networks.

Registration deadline: Feb 16 (Bahman 28)
http://nano.ipm.ac.ir/nnap

IPM