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Topic: **Deep Learning: Auto-encoders**

Abstract:

Autoencoding may be regarded as a type of mapping from one feature space to the same feature space, but via a transformation. These transformations are data specific and the compression is lossy. Despite that, it learns automatically from the examples. The practical applications of autoencoders were rare some time back, but due to the Deep Learning hype, the use of autoencoders found a new meaning. With appropriate hyperparameters, autoencoders can learn data projections that are much more interesting than other feature extraction techniques. It does not require any new engineering and just consists of an encoding and decoding part implemented with neural networks. However, these features extracted by autoencoders are much better than traditional methods. In this talk, we would dive deep into deep learning using autoencoders.