Practice Autoencoders

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1 Learning to reconstruct images

In this example, we want to experiment with autoencoders for reconstructing images. We will use as a base code from this github project: https://github.com/aymericdamien/
TensorFlow-Examples. The code has already been imported in our local repository and is located under dl-perception-rg/sample_code/chapter_14. Modify the file autoencoder_original.py to:

- Use the TensorFlow estimator API, store/restore checkpoints, and display the loss information in TensorBoard.
- Add one more layer in the encoder / decoder architecture and observe the effect on the final loss.
- Compare the two-layer and three-layer autoencoder with the same capacity.