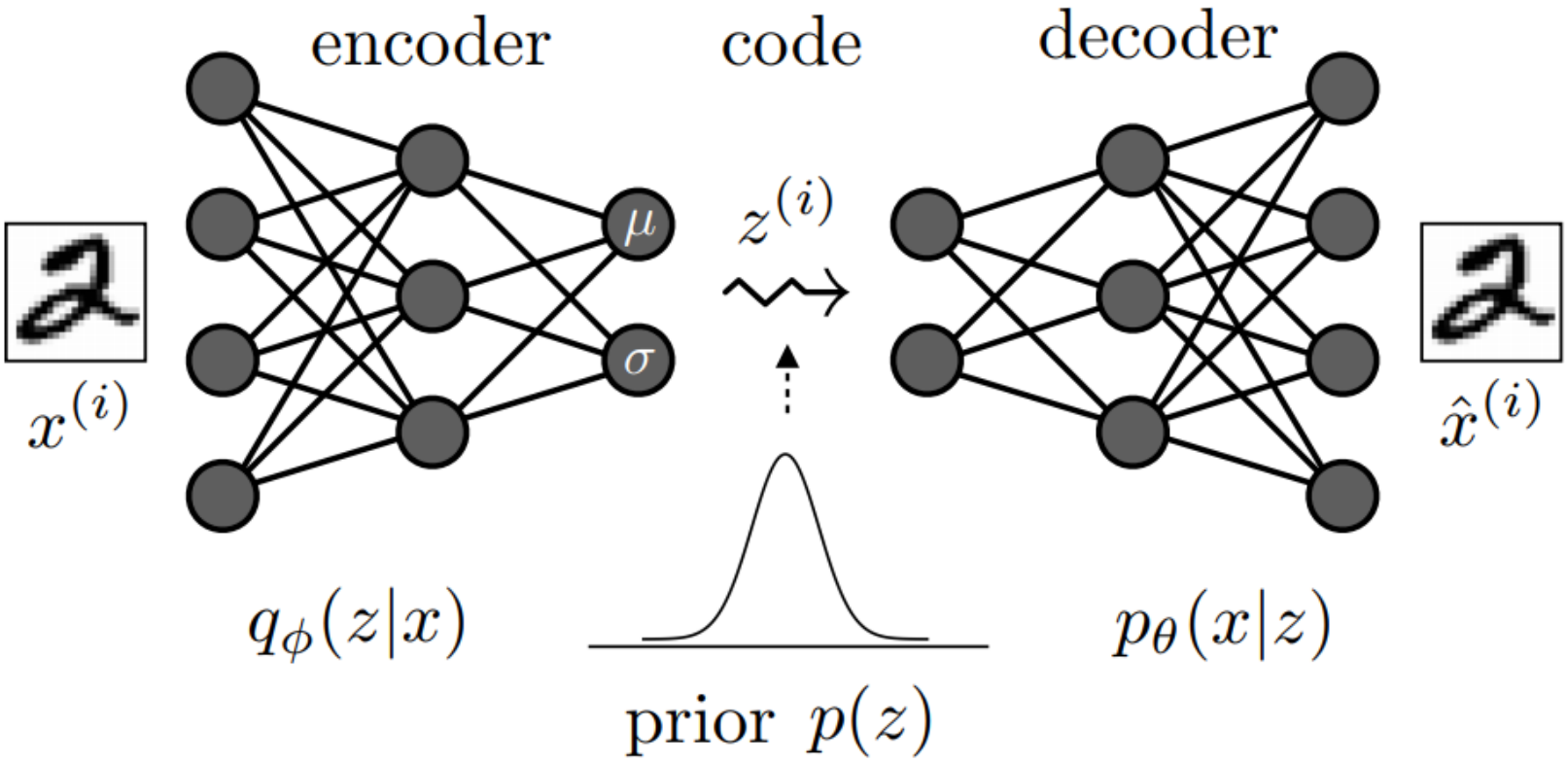
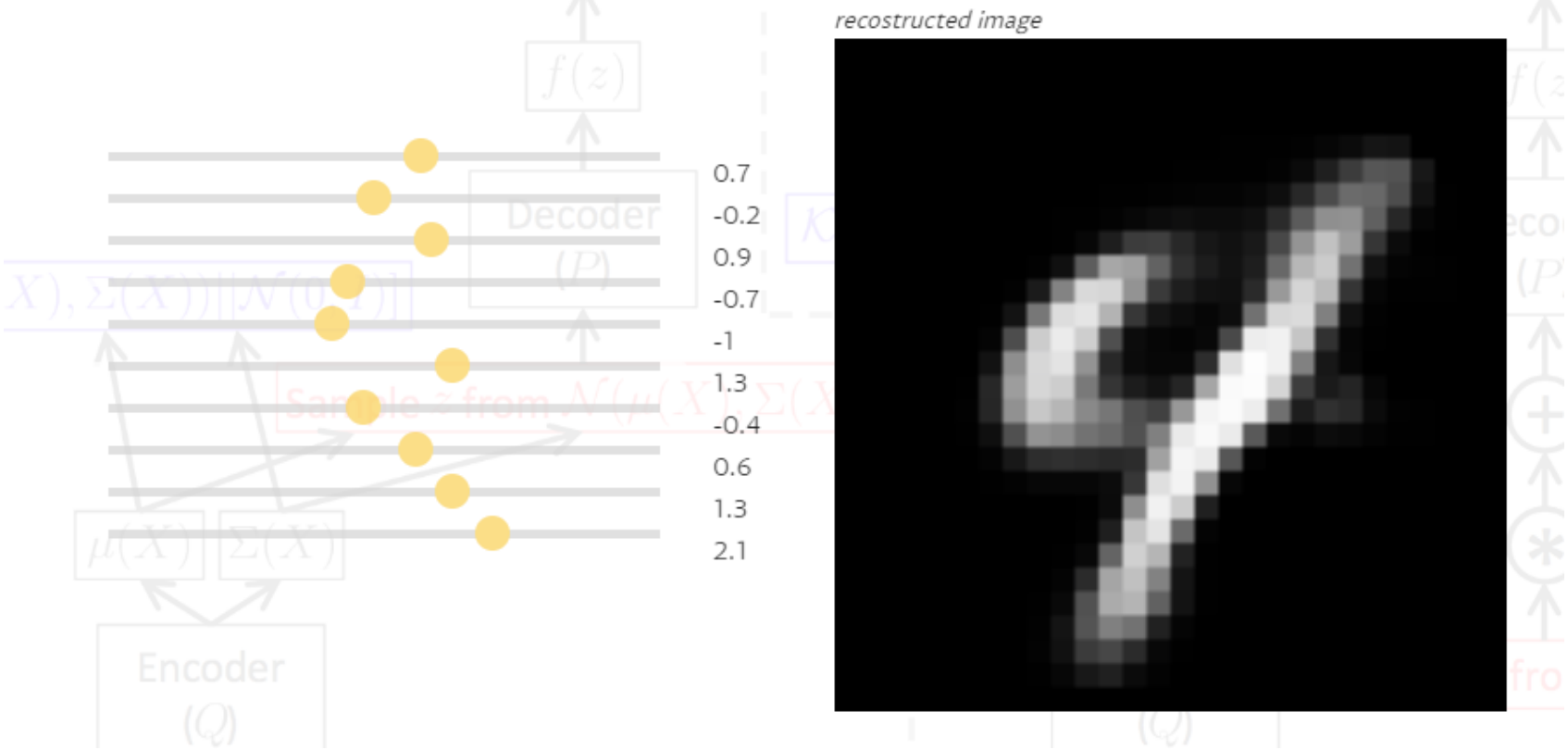
Autoencoder

Hochschule Offenburg
University of Applied Sciences

Autoencoder

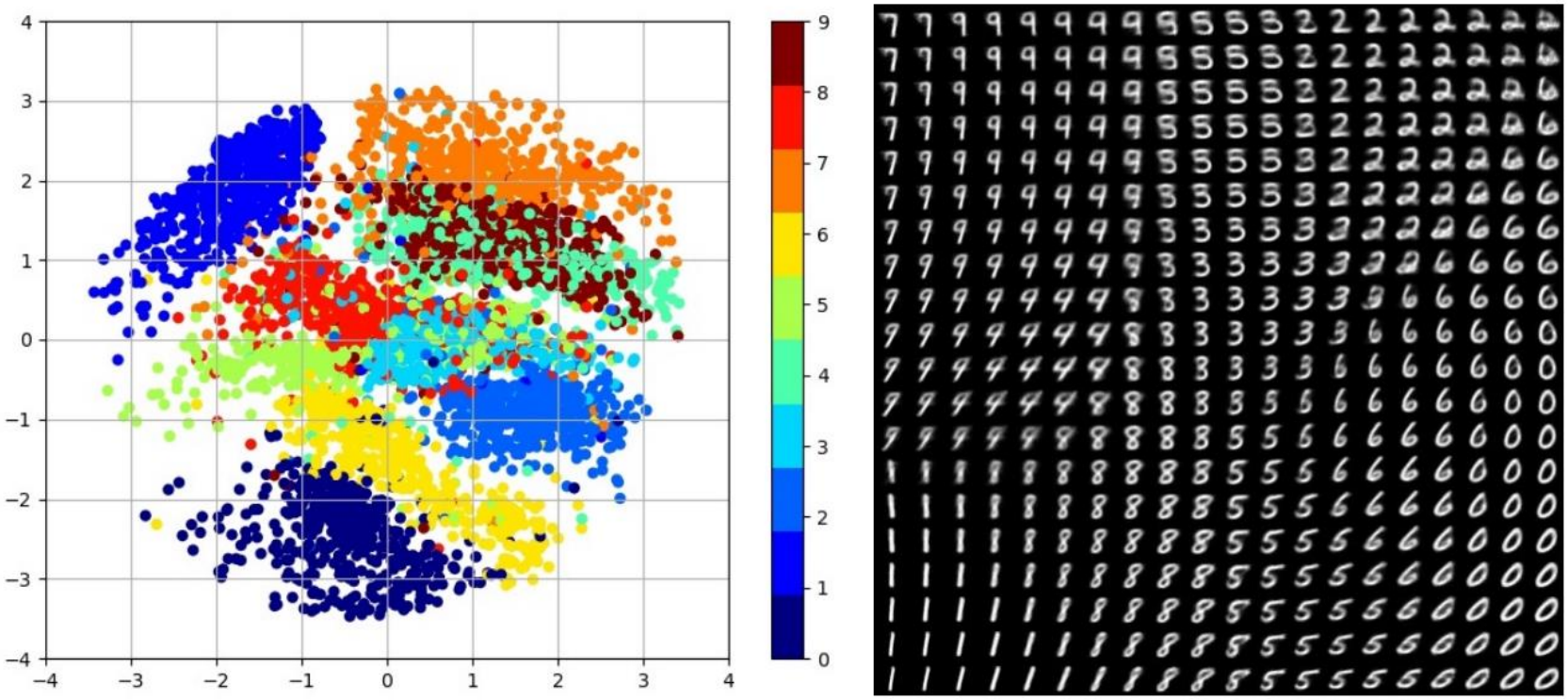


Demo

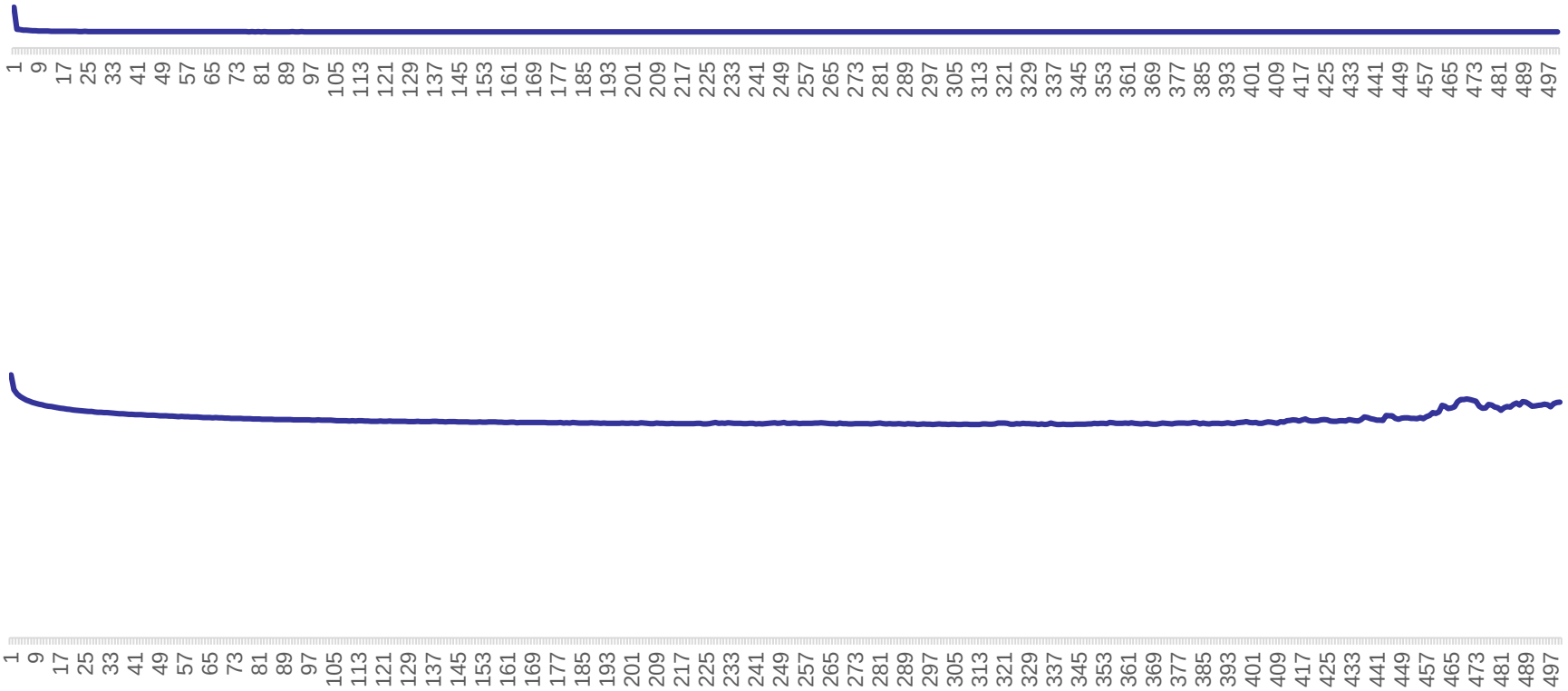


https://www.siarez.com/projects/variational-autoencoder

Visualization



1 Neuron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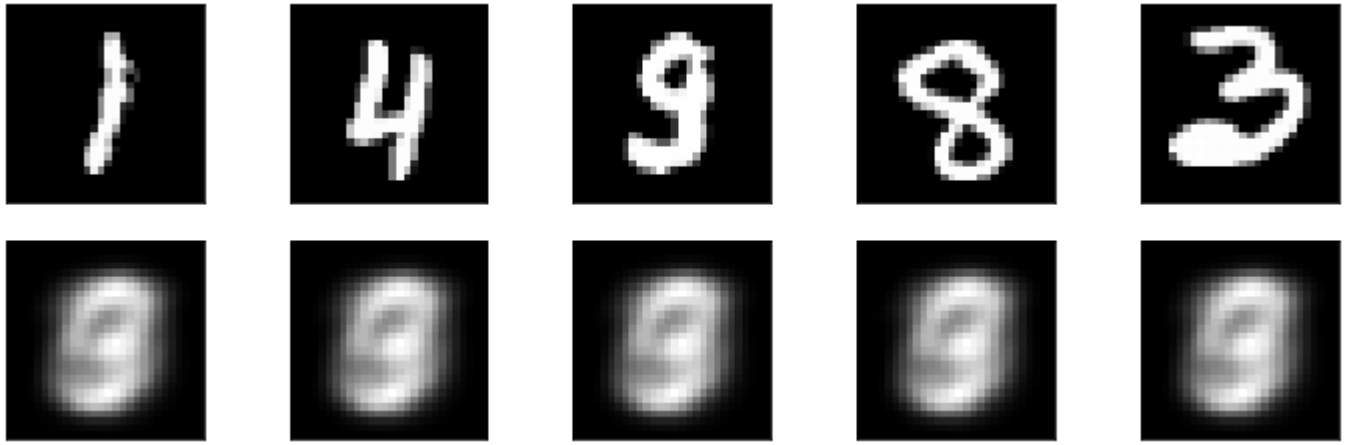
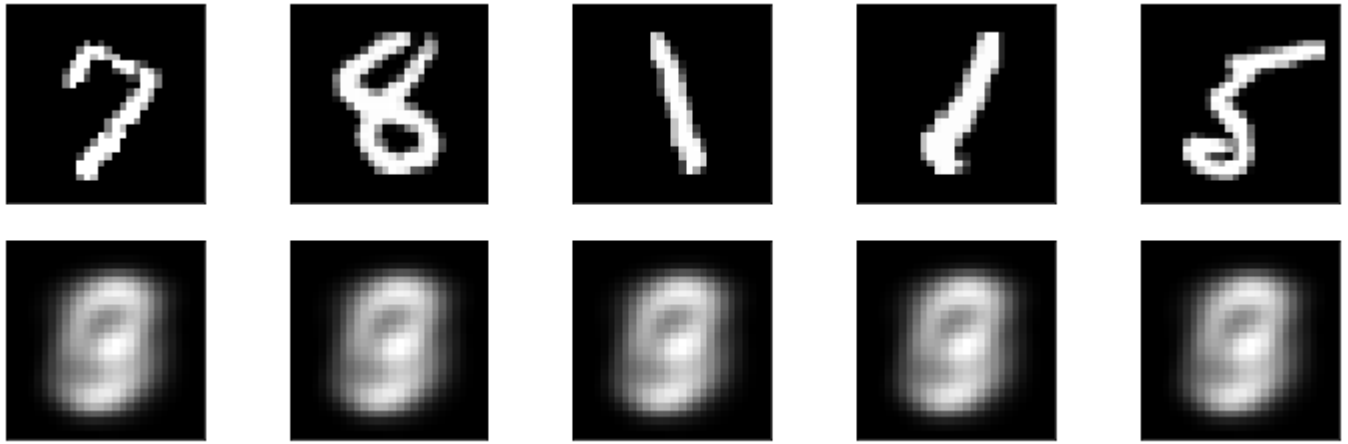
1 9 17 25 33 41 49 57 65 73 81 89 97 105 113 121 129 137 145 153 161 169 177 185 193 201 209 217 225 233 241 249 257 265 273 281 289 297 305 313 321 329 337 345 353 361 369 377 385 393 401 409 417 425 433 441 449 457 465 473 481 489 497

1 Neuron

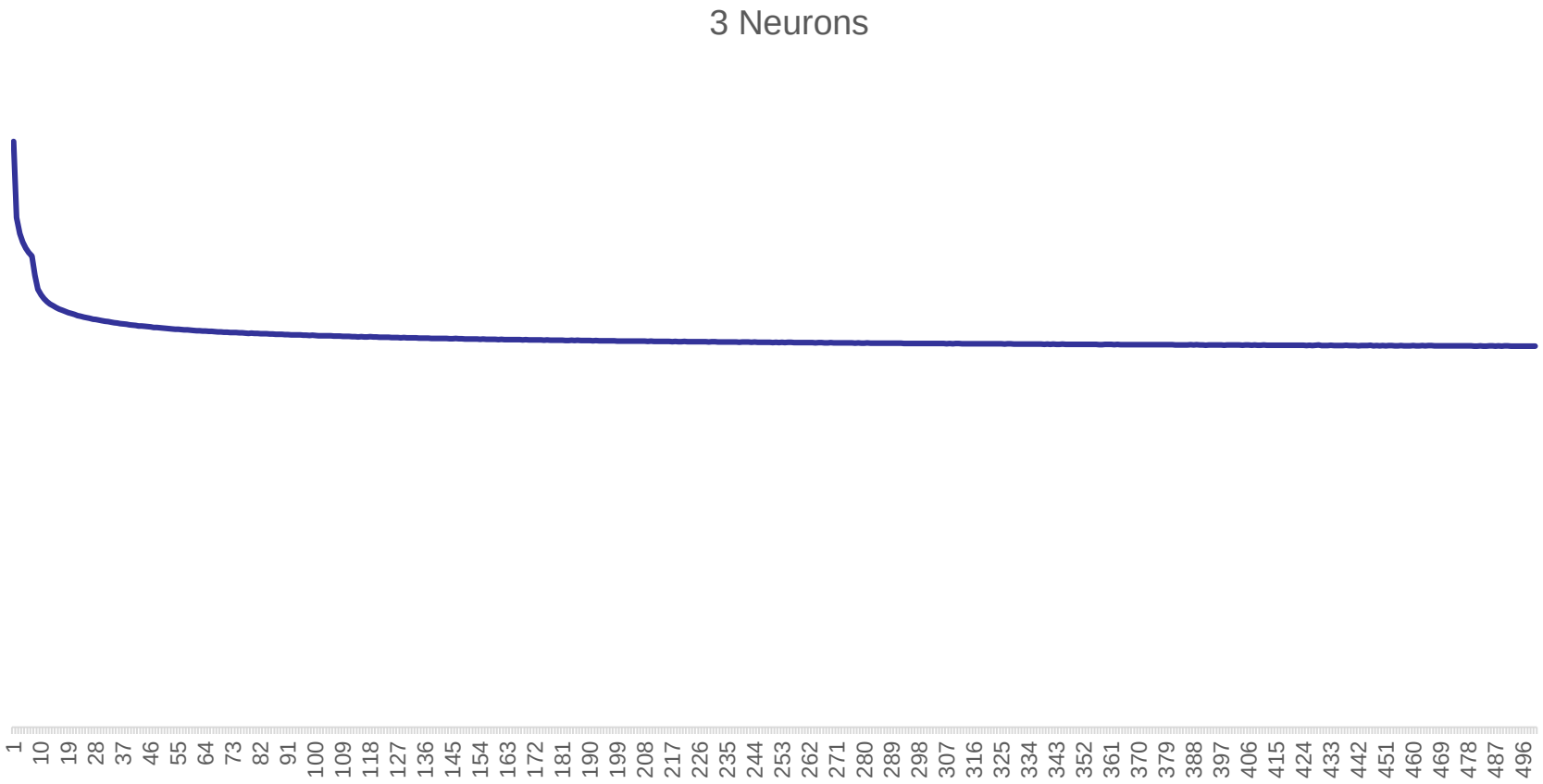
1. Epoch



500. Epoch



3 Neurons


3 Neurons
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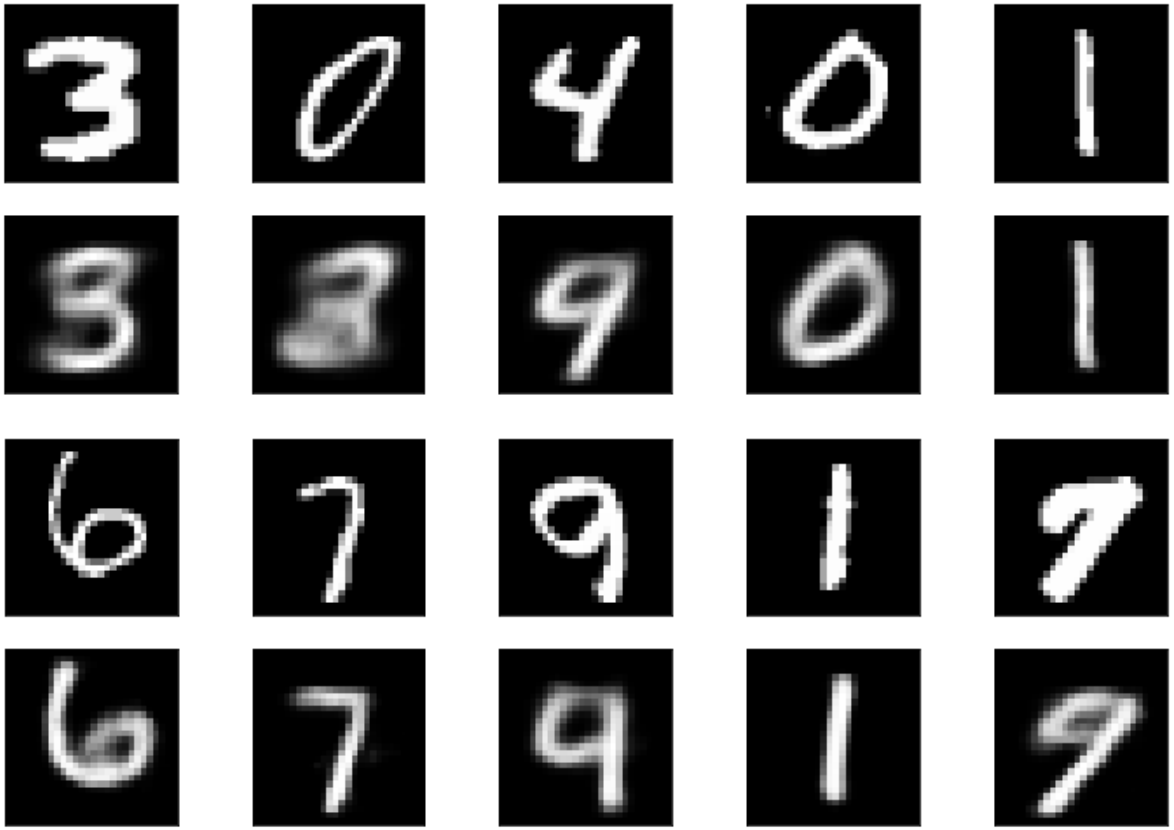
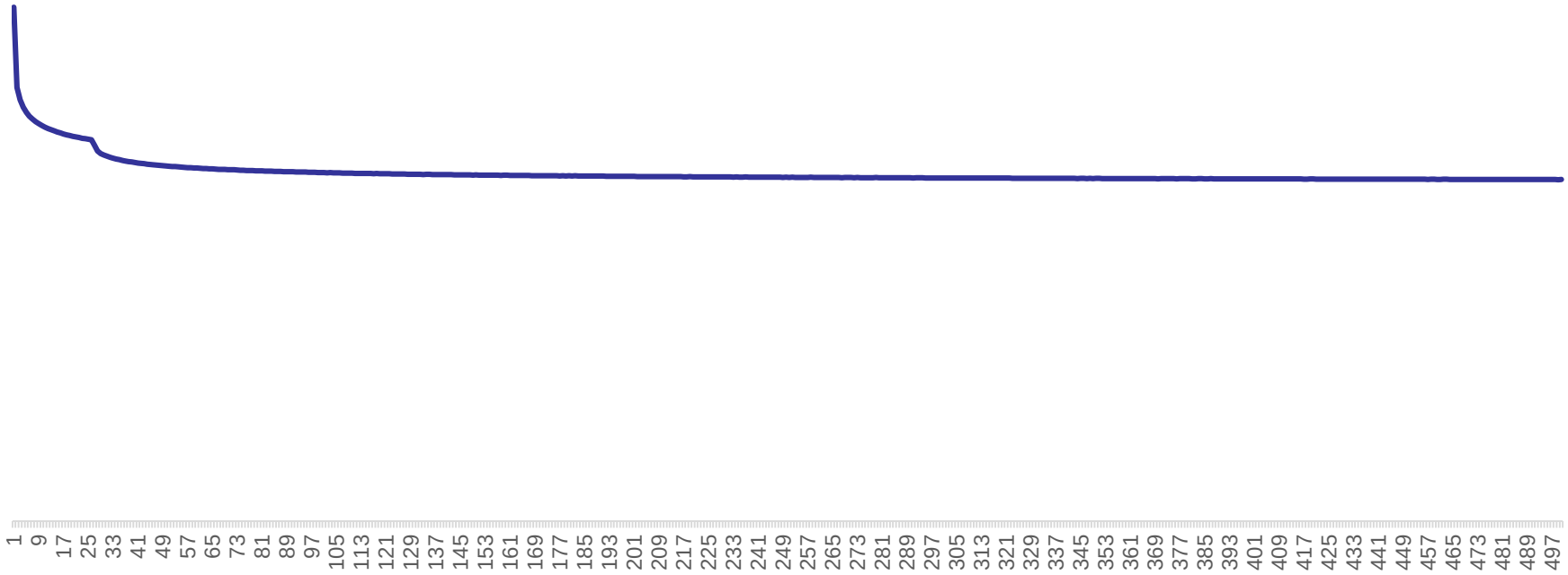
3 Neurons

1. Epoch

500. Epoch



10 Neurons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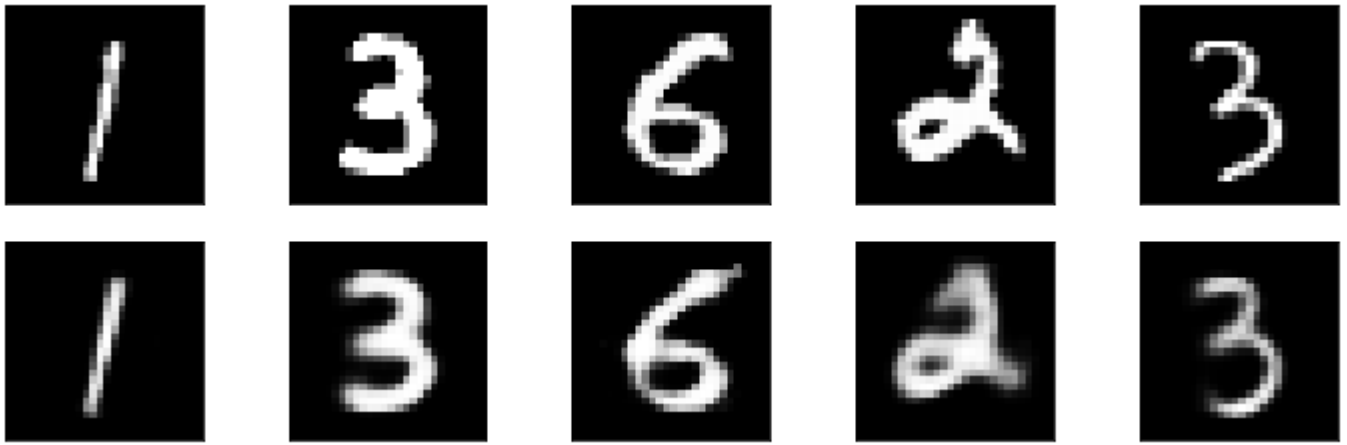
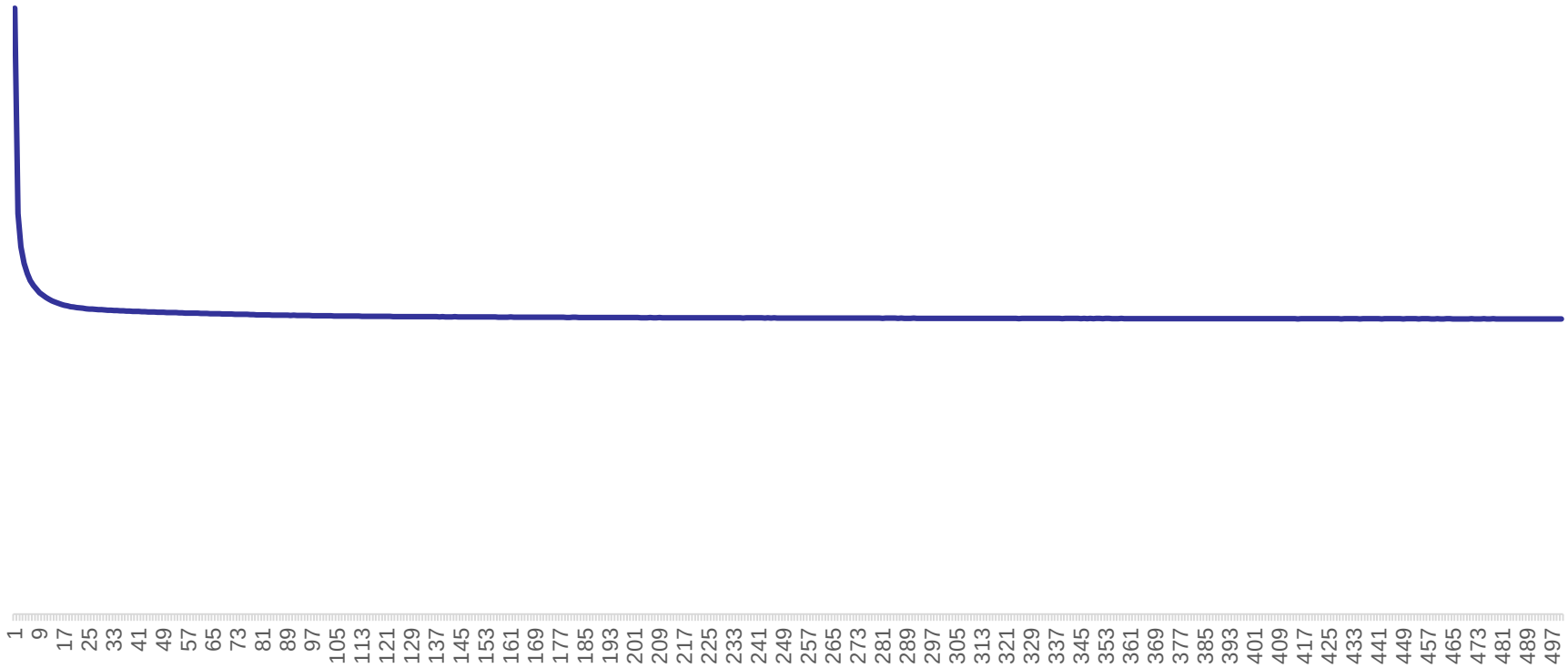
10 Neurons

1. Epoch

500. Epoch



100 Neurons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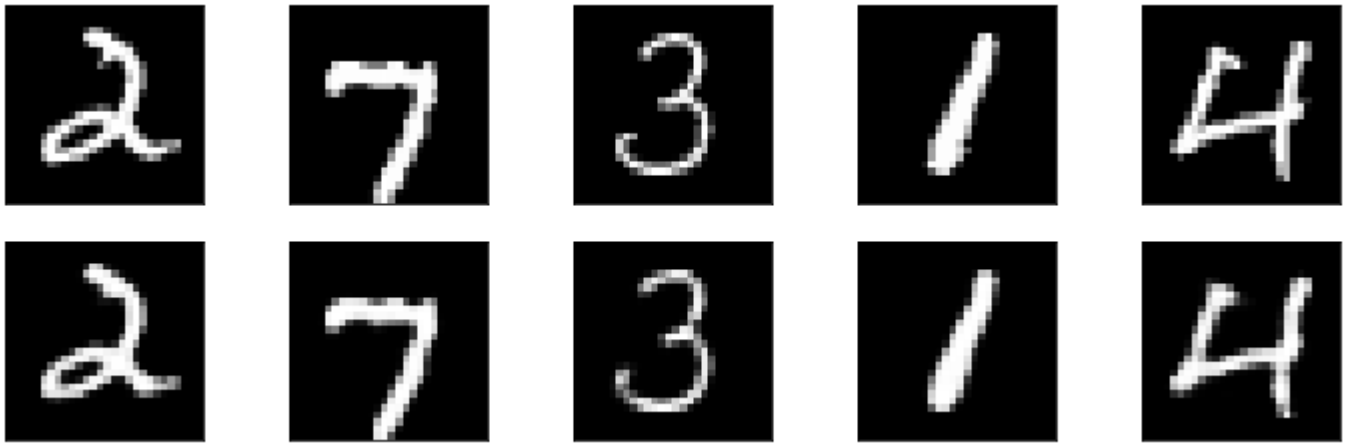
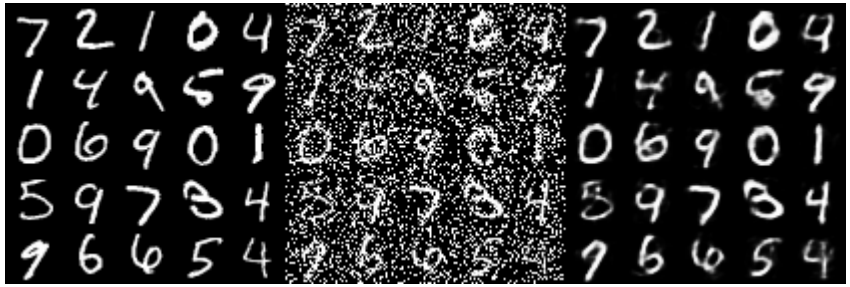
100 Neurons

1. Epoch

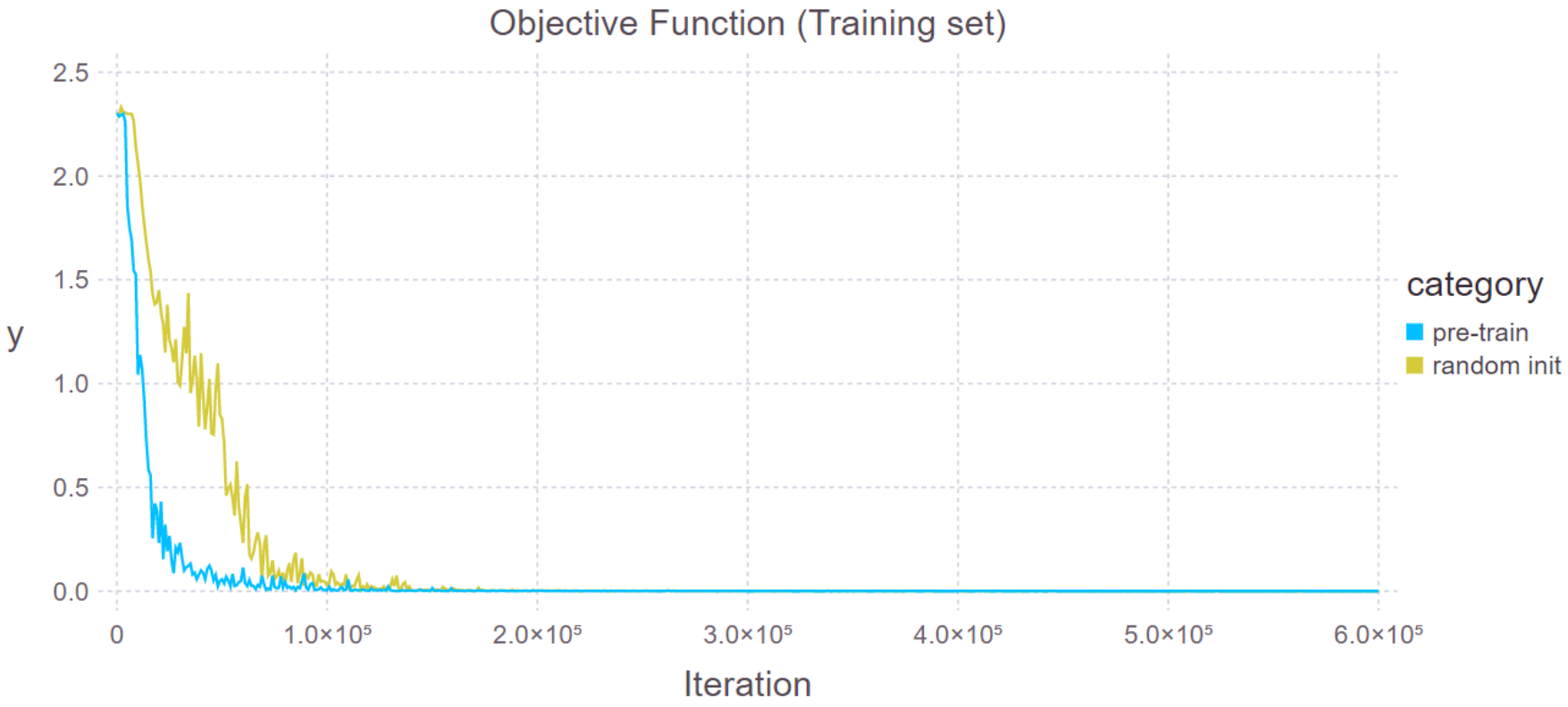
500. Epoch



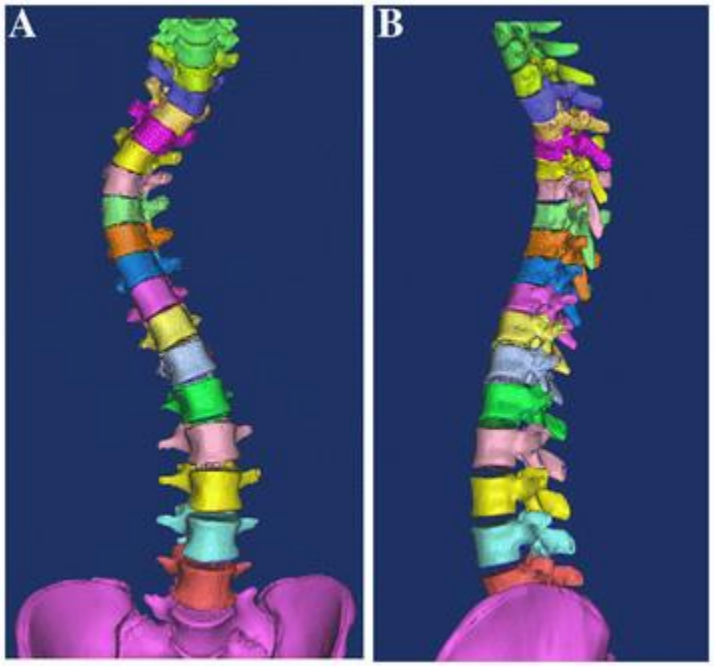
Applications



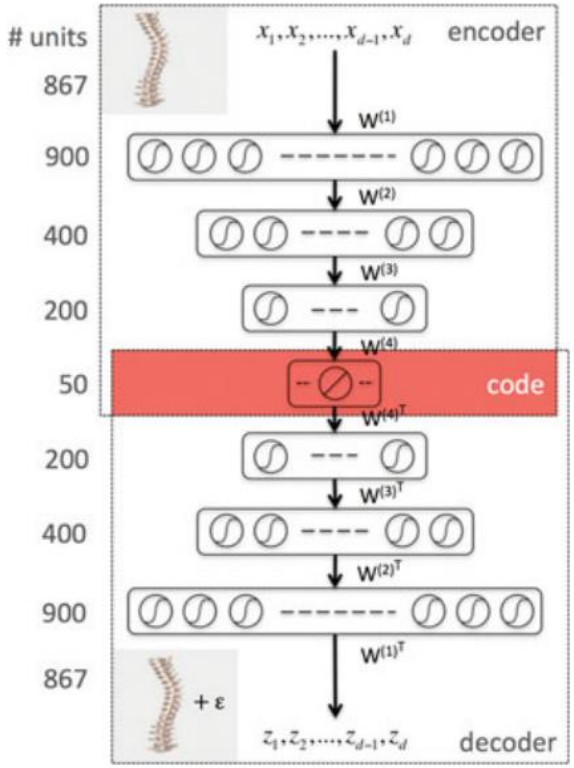
Applications



Applications



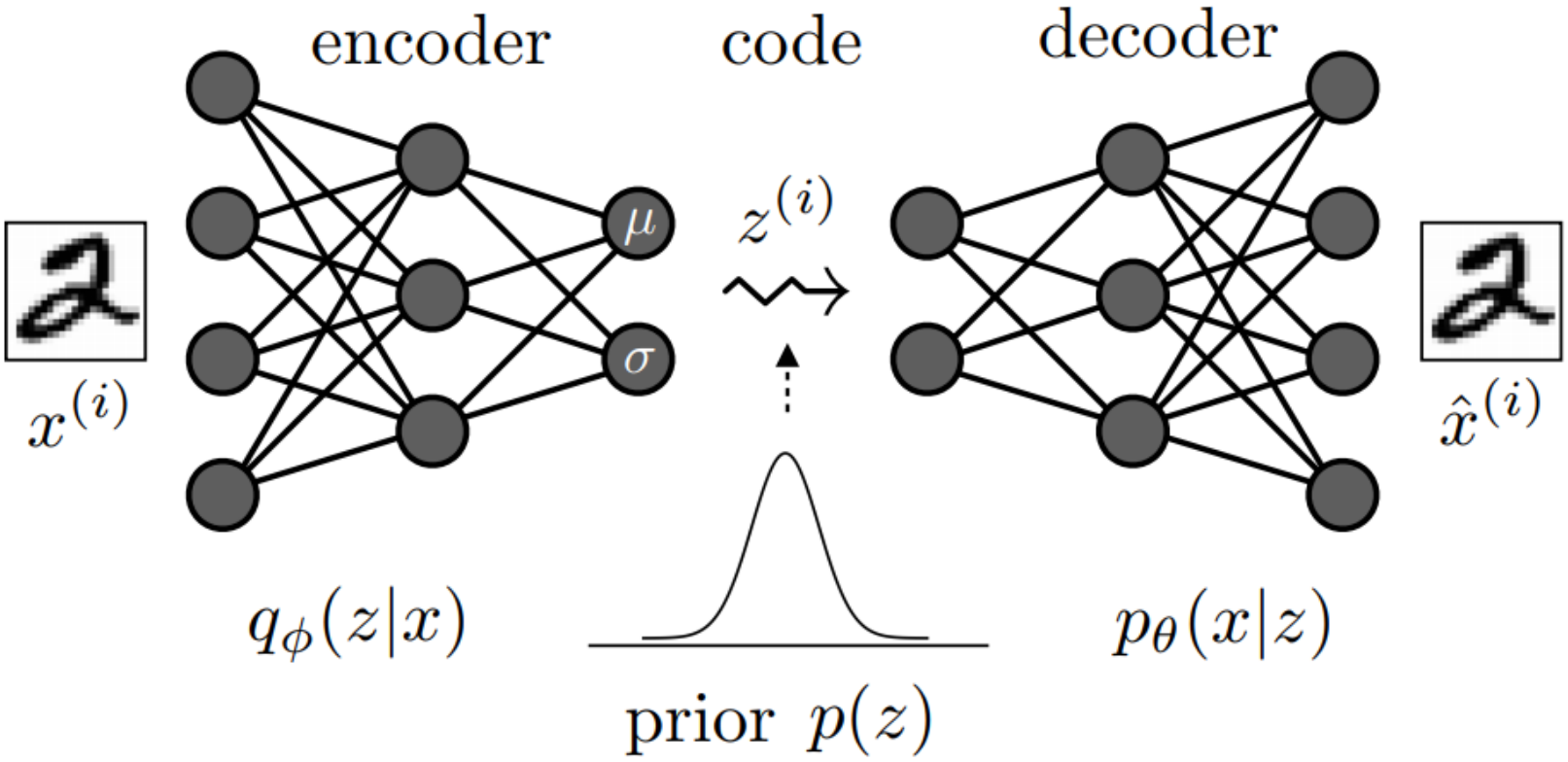
https://www.researchgate.net/figure/Segmented-3D-spine-modelA-Frontal-view-B-Lateral-view-A-segmented-3D-model-of-the_fig1_225300542



https://rd.springer.com/chapter/10.1007%2F978-3-319-14148-0_2

3D Spine Models in Adolescent Idiopathic Scoliosis

Autoencoder



Sources

- „Tutorial on Variational Autoencoders“ https://arxiv.org/pdf/1606.05908.pdf
- „Auto-Encoding Variational Bayes“ https://arxiv.org/pdf/1312.6114.pdf

- http://www.opendeep.org/v0.0.5/docs/tutorial-your-first-model
- https://mochajl.readthedocs.io/en/latest/tutorial/mnist-sDA.html
- Additional sources: See Related links

Related links

- https://www.siarez.com/projects/variational-autoencoder

- https://dbs.uni-leipzig.de/file/Saalmann_Ausarbeitung.pdf
- https://arxiv.org/pdf/1606.05908.pdf

- https://github.com/manureini/Autoencoder