Project C

Mathematical Underpinnings

Variational Deep Autoencoder (VaDE)

This is the preliminary version of the project because the topics related to it have not yet been covered in the lecture.

The goal of this project is to perform clustering using VaDE (Jiang et al). The task is to implement VaDE (special attention should be paid to pretraining the weights and latent space parameters), and to check its performance on several real-world datasets. Performance evaluation should be carried out using appropriate metrics (see clustering performance evaluation). Additionally, visualisation of the learned embedding should be provided for one datasets.