Group K Final Project: Learn and visualize representations for large datasets

This is a review and implementation of the paper [McQueen et al., 2016]. Choose if you want to use "megaman", "datafold", or test neural network performance against theirs.
We want to build our own neural network and compare its performance against the implementations in the paper.

***Task 1:** Description of the data sets (10%)*
We will use a high-dimensional image dataset and describe how this is applicable for our project

***Task 2:** Implementation of the fast representation algorithms (Maybe CNN or other neural net) (35%)*
Here we will build our own network architecture (probably Autoencoder)

***Task 3:** Tests on a large dataset you make up yourself (20%)*
Test our network in terms of accuracy, that is the error in the reconstructed image compared to the original image. Also test in regards of performance.

***Task 4:** Tests on one of the large datasets in the paper (20%)*
The two datasets are "Galaxies" and "Word2Vec", we will probably test it against Word2Vec but first want to gain more insight into both datasets.

***Task 5:** Comparison to their results (15%)*
Here we compare the performance and accuracy from our network with the implementation from the paper. We discuss differences and highlight positive or negative aspects of both implementations.