

Kernel Smoother

1. Download Animals with Attributes (AwA2) dataset from <https://cvml.ist.ac.at/AwA2/>. This dataset consists of 37322 images of 50 animal classes with pre-extracted deep learning features for each image. Split the images in each category into 60% for training and 40% for testing.
2. Use KNN and kernel smoother for image classification based on the deep learning features. For KNN, tune the hyperparameter K. For kernel smoother, tune λ and kernel type.
3. Summarize your experimental results and write a project report in English. The project report should contain the experimental results you obtained, and the experimental observations based on your experimental results.