

# CV: Lab 04 Writeup

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## Assignment

This weeks assignment was split into two parts:

- Implementing a Bag-of-words Classifier
- Implementing a CNN-based Classifier for the CIFAR-10 dataset

## Bag-of-words Classifier

We implemented a bag-of-words classifier using the following steps:

- Generate bag-of-words histogram for each training image
- Find interesting ke
- Given a test image calculate bag-of-words histogram
- Find its nearest neighbor training histogram
- Predict: assign it the category of this nearest training image (0/1)

## Local Feature Extraction

We start by extracting local features from the images using the SIFT algorithm as discussed in the lecture.