



Università degli Studi di Brescia

## Multimedia Communication Services Lab experience n. 9

### Vector Quantization

Implement a vector quantization scheme for a natural image:

- Build the codebook by means of generalized Lloyd-Max algorithm, using blocks  $8 \times 8$  pixels.
- Reconstruct the image at each iteration, using the codebook as given at that iteration, and compute the reconstruction error.
- Repeat the procedure many times with different initializations, checking their effect on the convergence