- **Decomposing signals in components (matrix factorization problems)**

- **Principal component analysis (PCA)**

- **Truncated singular value decomposition and latent semantic analysis**

- **Dictionary Learning**

- **Factor Analysis**

- **Independent component analysis (ICA)**

- **Non-negative matrix factorization (NMF or NNMF)**

- **Latent Dirichlet Allocation (LDA)**