I. Introductions and course overview

II. Low-level feature extraction: filters, edges, texture
   a. Basic form of digital images
   b. Linear filtering
      i. Definition of correlation, convolution filtering
   c. Filters for smoothing (box, Gaussian, median)
   d. Filters for features
      i. Gradients and edges
      ii. Filter banks and texture

III. Local invariant features
   a. Detection of interest points
      i. Harris corner detection
      ii. Scale invariant blob detection: LoG
   b. Description of local patches
      i. SIFT: Histograms of oriented gradients