

Motion segmentation

1. Background subtraction

Object detection

1. Point detector
2. Background subtraction
3. Segmentation
4. Supervised learning

Selection of image features

1. Color
2. Edges
3. Optical flow
4. Texture

Object Representation

1. Shape
 - a. Point(s)
 - b. Geometric shapes
 - c. Silhouette/contour
 - d. Articulated shape models
 - e. Skeletal
2. Appearance
 - a. Histogram
 - b. Templates
 - c. Multi-view
3. Shape+appearance
 - a. Active appearance models

Tracking methods

1. Point tracking
 - a. Probabilistic
 - b. Deterministic
2. Region tracking
 - a. Multi-view based
 - b. Template based
3. Silhouette tracking
 - a. Contour evolution
 - b. Shape matching

PCA
View subspace
Classifier
RVQ, TSVQ