

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. Multiview

3. Shape+appearance

- a. Active appearance models

Tracking methods

1. Point tracking

- a. Probabilistic
- b. Deterministic

2. Kernel tracking

- a. Multi view based
 - b. Template based
- View subspace
Classifier

3. Silhouette tracking

- a. Contour evolution
 - b. Shape matching
- State space
Direct minimization
- Variational
Heuristic