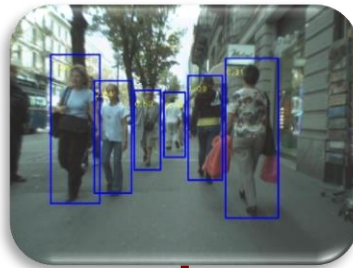
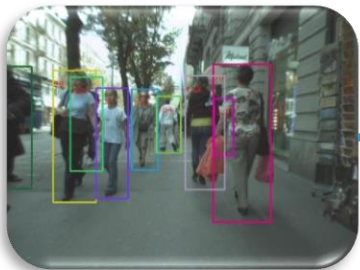


Detections (t)



Tracked Targets (t-1)



Input Image Frame

**R-FCN
(SqueezeNet)**

Feature Map

**Tracking
(Kalman
Filter)**

Classification

**Affinity
Network
(GoogLeNet)**

Distance Matrix

	1	2	3	4
1	2.6	0.11	0.2	0.4
2	0.1	3.8	0.15	0
3	0	0.2	0.25	0.2
4	0	0.12	0.16	0.42

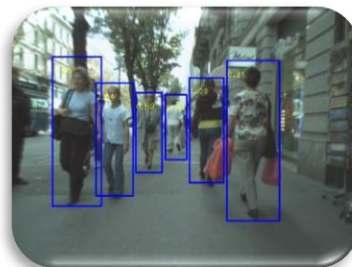
DHN

**Answer
Sheet**

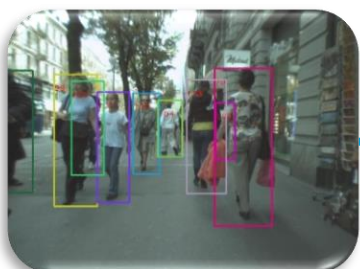
	1	2	3	4
1	0.8	0.2	0	0.1
2	0.1	0.9	0.1	0
3	0.1	0.2	0.2	0.1
4	0.1	0.1	0	0.2

Association Matrix

Detections (t)



Tracked Targets (t-1)



Input Image Frame

**ResNet-101
(FPN)**

Feature Map

**Tracking
(Regression)**

**Classification
(Filtering)**

**Affinity
Network
(Siamese
CNN)**

Distance Matrix

	1	2	3	4
1	2.6	0.11	0.2	0.4
2	0.1	3.8	0.15	0
3	0	0.2	0.25	0.2
4	0	0.12	0.16	0.42

DHN

**Answer
Sheet**

	1	2	3	4
1	0.8	0.2	0	0.1
2	0.1	0.9	0.1	0
3	0.1	0.2	0.2	0.1
4	0.1	0.1	0	0.2

Association Matrix