



Input
Image

YOLO
Person
Detection

Sort Algorithm

KF Estimation

Kalman filter
Prediction
 \hat{X}^-, P^-

Previous
State

State
Prediction

Kalman filter
Update
 \hat{X}, P

Cost
Matrix
Matching

Matched
Measurement

Unmatched
Measurement

Unmatched
Tracks

Data Association

Track Management

Array of
Tracks

Output
Conditions

Track
Initialization

Delete
Conditions

Track
Delete

Output

Person
Bounding
Boxes, Width,
Height
&
Track IDs