**Some blogs to get abstract idea about object tracking and its applications**

Blog-1: <https://www.basic.ai/blog-post/object-tracking-in-computer-vision?utm_source=chatgpt.com>

Blog-2: <https://encord.com/blog/object-tracking-guide/?utm_source=chatgpt.com>

Blog-3: <https://blog.roboflow.com/what-is-object-tracking-computer-vision/?utm_source=chatgpt.com>

Blog-4: <https://viso.ai/deep-learning/object-tracking/?utm_source=chatgpt.com>

**More intuition and implementation of object tracking algorithms**

Before dive into the deep learning-based object tracking algorithm, it is recommended to study about the Kalman Filter. Here are some resources:

Kalman Filtering in pictures: <https://www.bzarg.com/p/how-a-kalman-filter-works-in-pictures/>

Simplified Kalman Filtering: <https://thekalmanfilter.com/kalman-filter-explained-simply/>

Kalman Filtering tutorial: <https://www.mathworks.com/videos/series/understanding-kalman-filters.html>

Understanding Kalman Filtering: <https://www.analyticsvidhya.com/blog/2021/10/an-intuition-about-kalman-filter/>

Kalman Filtering in depth: <https://medium.com/@jaems33/understanding-kalman-filters-with-python-2310e87b8f48>

Kalman filter: <https://medium.com/@jumabek4044/kalman-filter-in-object-tracking-explained-part-1-76c3bfe36e68>

One-dimensional Kalman Filter: <https://github.com/rlabbe/Kalman-and-Bayesian-Filters-in-Python/blob/master/04-One-Dimensional-Kalman-Filters.ipynb>

Kalman Filter Math: <https://github.com/rlabbe/Kalman-and-Bayesian-Filters-in-Python/blob/master/07-Kalman-Filter-Math.ipynb>

Filter Py docs: <https://filterpy.readthedocs.io/en/latest/>

Kalman and Bayesian Filters in Python: <https://github.com/rlabbe/Kalman-and-Bayesian-Filters-in-Python/>

**Sort Algorithm**

Sort concepts: <https://medium.com/@curiositydeck/an-introduction-to-object-tracking-algorithms-a-beginners-guide-877771d3a9cf>

YOLO-V8 + SORT: <https://medium.com/@mosesdaudu001/object-detection-tracking-with-yolov8-and-sort-algorithm-363be8bc0806#:~:text=Overview%20of%20SORT-,The%20Simple%20Online%20and%20Real%2Dtime%20Tracking%20(SORT)%20algorithm,over%20union%20(IOU)%20metric>.

YOLO-V8 + Sort Implementation: <https://github.com/RizwanMunawar/yolov8-object-tracking>

Sort in MATLAB: <https://www.mathworks.com/help/fusion/ug/implement-simple-online-and-realtime-tracking.html>

**Object Tracking**

OpenCV algorithms: <https://pyimagesearch.com/2018/07/30/opencv-object-tracking/>

Object tracking (C++/Python): <https://learnopencv.com/object-tracking-using-opencv-cpp-python/>

Object Tracking: <https://lotuslabs.medium.com/what-is-object-tracking-9c26b32b1894>

Object tracking: <https://medium.com/data-centric-ai/an-object-tracking-introduction-2a66d0e5ed13>

Object tracking implementation: <https://www.datature.io/blog/implementing-object-tracking-for-computer-vision>

Object tracking implementation (DeepSORT): <https://www.geeksforgeeks.org/object-tracking-in-computer-vision/>

Introduction to ByteTrack: <https://www.datature.io/blog/introduction-to-bytetrack-multi-object-tracking-by-associating-every-detection-box>

Multiple object tracking: <https://learnopencv.com/understanding-multiple-object-tracking-using-deepsort/>

FairMOT: <https://learnopencv.com/object-tracking-and-reidentification-with-fairmot/>

YOLO Track: <https://docs.ultralytics.com/modes/track/>

DeepSORT original (TensorFlow): <https://github.com/nwojke/deep_sort/tree/master/deep_sort>

DeepSORT Implementation-1: <https://github.com/ModelBunker/Deep-SORT-PyTorch/tree/master>

DeepSORT Implementation-2: <https://github.com/ZQPei/deep_sort_pytorch/tree/master>

DeepSORT Implementation-3: <https://github.com/Serurays/Sample_Detection_Tracking_Yolov8_DeepSORT_Robotics/blob/main/Color_Sample_Detection.ipynb>

**More resources**

Single object tracking: <https://github.com/memoryunreal/awesome-single-object-tracking>

**Medium**

Multi-object tracking: <https://medium.com/tag/multi-object-tracking>

Object tracking + detection: <https://medium.com/tech-blogs-by-nest-digital/object-tracking-object-detection-tracking-using-bytetrack-0aafe924d292>

DeepSort: <https://medium.com/%40polatkuzdere_20/why-choose-deepsort-for-object-tracking-328a9aa3cc81>

Multiple object tracking: <https://medium.com/tag/multiple-object-tracking>

Implementation

Tracking + counting + Entrance: <https://github.com/MuhammadMoinFaisal/Computervisionprojects/tree/main/YOLOv8_Tracking_Counting_SpeedEstimation>

Video: <https://www.youtube.com/watch?v=nkptX_vXJKo&ab_channel=MuhammadMoin>