Design and Implementation of a Real-time Target detection and Tracking System

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Abstract—Target detection is to quickly and accurately locate the object to be measured in the video image and correctly classify it. Target tracking is to obtain the motion parameters of the object in the image sequence, and to detect, extract, identify and track the specific object. Combining target detection and tracking to follow specific objects is one of the research hotspots in the realization of intelligent embedded terminals. This paper designs and implements a system that combines target detection and tracking, which can realize real-time tracking of specific objects. Finally, the experiments prove the reliability of the proposed system, which can be used in intelligent systems such as robots.

Keyword—Target detection, Target detection, Deep learning, Real-time System, YOLOv3-tiny



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