Target Tracking by Using A Decentralized Data Fusion Algorithm

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ABSTRACT

In the radar system, it usually has more measurement plots than the number of target tracks because of the complicated tracking environment and noise outsides, so the research of technology of the radar tracking system, the importance changed, In the real radar systems, target merge, clutter environment, and target maneuvering are the most critical parts in the computation of tracking performance. When radar systems detect a large area and only use single sensor to detect the whole area, it will waste a lot of time and it may miss some data also. Otherwise, if one uses multiple sensors to detect, the time use will be shorter and the data will more completed also. The multi-sensors' technology is gradually useful. Distributed system is that the local system will make the local estimation first, and then deliver the data to the center processor to combine such data. This research describes the correlation between the distributed system and the target tracking system in order to solve the problem of radar system and further produce the overall estimation.

Keywords : distributed system ; multiple sensor ; data fusion

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