

OS-CFAR Based on Insertion Sorting Algorithm Using Linked-List Structure

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Abstract—CFAR is used to detect the target keeping constant false alarm rate. CA-CFAR is simplest method used for target detection but it is not effectively work in non-homogeneous environment. OS-CFAR is effective than CA-CFAR in non-homogeneous environment. It uses sorting algorithm based on rank but this method is highly computational. In this paper, we proposed new method for sorting for OS-CFAR. Anchor based insertion and sorting in Linked-List based structure which represents ordered sequence and Anchors represents featured samples. This scheme reduces computations and this is verified through results.

Index Terms—CFAR, link list, ordered statistics, insertion, sort.

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