CMAC-Based Radar Target Recognition

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Abstract

Radar plays a crucial role in the modern electronic warfare. The identification of radar types, parameter information, platform features, and operation conditions all contribute to a commander's decision-making process. However, as a traditional electronic intelligence reconnaissance system (ELINT) relies on merely one single platform with built-in sensors to retrieve the above-mentioned information, the outcome seems problematic. In this paper, a combination of attributes and cerebella model articulation controller (CMAC) is adopted for feature extraction with more precision. The experiments have shown that CMAC can yield satisfactory performance in data fusion system.

Keyword：Radar radiation, Data fusion, CMAC, Fuzzy decision