عنوان مقاله:

A Novel Algorithm for Clustering of Radar Interleaved Pulses in Busy Radar Environments

محل انتشار:

اولین کنفرانس بین المللی دستاوردهای نوین پژوهشی در مهندسی برق و کامپیوتر (سال: 1395)

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نویسندگان:

Navid Daryasafar - *Faculty of Electrical Engineering Dashtestan Branch, Islamic Azad University Borazjan, iran*

Hamid Dehghani - *Faculty of Electrical Engineering Malek Ashtar University Tehran, Iran*

Azim Rezaei Motlagh - *Faculty of Electrical Engineering Dashtestan Branch, Islamic Azad University Borazjan, Iran*

خلاصه مقاله:

Deinterleaving of radar pulses is performed based on features of pulse trains, including pulse arrival time, pulse width, radio frequency, and among others. Radar pulse deinterleaving is one of the most important parts of radar identification system in which identification/detection process of radar transmitters is done in simultaneous fashion. In this paper, a novel algorithm is proposed by the combination of Imperialist Competitive Algorithm, ICA, and k-means algorithm based on Rough set theory. The identification accuracy on radar data by this method was 78%, emphasizing the improved performance over the conventional methods. It will be shown that this new method can be successfully utilized in busy radar environments with various signals.

کلمات کلیدی:

Pulse Detection, Pulse Deinterleaving, Radar identification, Threshold Level

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