

## عنوان مقاله:

Multi-level image thresholding using GOA, WOA and MFO for image segmentation

## محل انتشار:

هشتمین کنفرانس بین المللی راهکارهای نوین در مهندسی، علوم اطلاعات و فناوری در قرن پیش رو (سال: 1400)

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## نویسندگان:

Taybeh Salehnia - *Department of Computer Engineering and Information Technology, Razi University Kermanshah, Iran*

Saadat Izadi - *Department of Computer Engineering and Information Technology, Razi University Kermanshah, Iran*

Mahmood Ahmadi - *Department of Computer Engineering and Information Technology, Razi University Kermanshah, Iran*

## خلاصه مقاله:

Nowadays, in image segmentation algorithms, meta-heuristic algorithms are widely used to determine multi-level thresholds. Many meta-heuristic algorithms use different methods as the fitness function to determine multi-level thresholds. They may encounter premature convergence to determine the number of thresholds, and fail to obtain the correct answer, which in this case leads to an inaccurate image segmentation and may even lower the quality of the image. In this paper, Moth-Flame Optimization (MFO), Whale Optimization Algorithm (WOA) and Grasshopper Optimization Algorithm (GOA) are utilized to determine multi-level thresholds, which use a mathematical equation using the corresponding image features as a fitness function. According to the experiments, all three proposed algorithms for the fitness function, it has a much better performance than the other algorithms and GOA is better than other algorithms and it has been able to increase the quality of image.

## کلمات کلیدی:

Image segmentation; multi-level thresholding; Moth-Flame Optimization (MFO); Whale Optimization Algorithm (WOA) (and Grasshopper Optimization Algorithm (GOA).

## لینک ثابت مقاله در پایگاه سیویلیکا:

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