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IMAGE SEGMENTATION USING MIN-CUT AND SWARM INTELLIGENCE

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Abstract

The rapid growth in the field of image processing is compelling for the performance enhancement in practical applications by processing image correctly. Image segmentation is one of the most important requirements of image processing, which is the process of partitioning an image into a set of objects and backgrounds. Segmentation plays vital role in analyzing an image automatically. The main objective of segmentation is to trace certain objects of interest by ignoring the effect of light, noise and texture on them. Among the different segmentation approaches, graph based techniques are most popular due to their capabilities of generating good segmentation structures. In this paper, we have proposed graph based discrete particle swarm optimization approach for minimal cut image segmentation. Which generates better segmentation results than other methods as well as helpful in the development of new hybrid methods.

Key Words : *Image segmentation, Swar intelligence, Particle swarm optimization.*