

## عنوان مقاله:

Toward Application of Sandpile Model in Image Segmentation Based on Extremal Optimization Heuristic

## محل انتشار:

کنگره ملی مهندسی برق، کامپیوتر و فناوری اطلاعات (سال: 1392)

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## خلاصه مقاله:

The sandpile model is a paradigm of self organizing critically (SOC) concept that is inspired by a physics-based intuition for optimization. In this paradigm, physical properties of sandpiles such as avalanche promise improved convergence and lower computations. Extremal Optimization (EO) algorithm is a general-purpose local search heuristic that is based on SOC. Here, application of sandpile model to image segmentation is proposed. In the proposed model, over-segmented images are submitted to the algorithm. Inspired by sandpile model, similar segments then merge, and by using the energy function in Markov random fields (MRF), EO adjusts the labels of pixels. Results indicate that sandpile model can be applicable to image segmentation

## کلمات کلیدی:

Sandpile model, extremal optimization, segmentation, merging

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/211115>

