عنوان فارسی مقاله:
الگوریتم بهینه سازی ازدحام ذرات با گروه های تعاملی برای رفع اهداف متعدد

عنوان انگلیسی مقاله:
A particle swarm optimization algorithm with interactive swarms for tracking multiple targets

توجه!
این فایل تنها قسمتی از ترجمه میباشد.
برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک نمایید.
Related work to our method can be divided into two main strands of research.

The first strand is tracking algorithms which incorporate social interactions of targets in the tracking process. This idea of integrating social interactions of targets in tracking algorithms is motivated by the behaviour of targets in a crowd. In crowded scenarios, the behaviour of each individual target is influenced by the proximity and behaviour of other targets in the crowd. Several methods [3-5,11] have proposed to integrate the social interactions among targets in the tracking algorithms. This direction has shown promising performance to track multiple targets in crowded scenes. An early example which models the social interaction of targets is Markov chain Monte Carlo (MCMC) based particle filter [11]. Their method models social interactions of targets using Markov random field and adds motion prior in a joint particle filter. The traditional approach is to filter individual targets using particle filters and combine the results. An alternative approach is to use a particle filter for each target and combine the results using a social interaction model.

In [5], the authors formulated the tracking problem as a problem of minimising an energy function. The energy function is defined based on the both social information and physical constraint in the environment. Their preliminary results indicate that social information provides an important cue for tracking multiple targets in a complex scene.

2. Related work

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