# Correcting the effect of camera shake in opticaltracking system

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**Abstract:** In this paper, a features-based stabilization method for tracking of floating targets is proposed. This method matches the prominent edges in subsequent frames, to compensate for the vertical camera shakes. Different edge detection operators, and different methods to distinguish the prominent edges are investigated. The prominent edges in subsequent frames are correlated to each other for finding best matches.
In a test on 3 sequences of 60 successive frames, a complete vertical stabilization has been achieved.

**Keywords:** Image processing, Edge detection, Optical tracking, Camera shaking, Digital image stabilization