



## IMAGE PROCESSING AND RECOGNITION ALGORITHM FOR TARGET TRACKING

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*Abstract- to improve target tracking performance in dynamic target track system, this paper propose the processing method of positive and negative difference image to extract target information; research target image preprocessing algorithm, the separation and segmentation processing algorithm of target and background, target edge detection and extraction based on the collected images; use Laplace operator, Canny operator. Gauss-Laplace operator to gain target information and improved recognition target image effect, analyze the positive and negative difference image measure to solve the background subtraction interference between two sequence images. Through the actual image processing, The results shows the proposed processing method can clear gain target marginal information and target image particle center, control tracking platform can stably track the target, and give the comparison results.*

**Index terms:** Target tracking; OUSU; Canny; difference image.