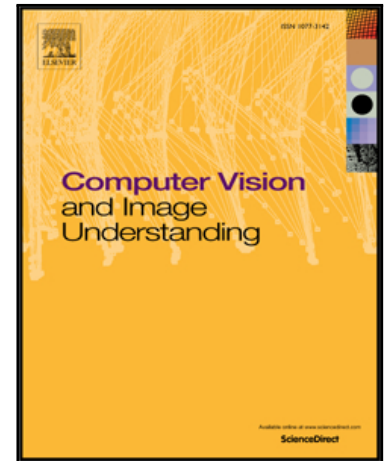


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Predictive RANSAC: Effective Model Fitting and Tracking Approach Under Heavy Noise and Outliers

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Highlights

- Introduce a new algorithm Predictive RANSAC
- Fits and tracks a model in the presence of a large number of outlier measurements and heavy noise.
- RANSAC and Kalman filter stages update and improve each other each iteration
- We prove our algorithm provides greatest possible selection of inliers under noise assumptions
- We test our algorithm for lane curve tracking, homography calculation, and pedestrian tracking under heavy noise.

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