

**A FUSION WORK FOR TRAFFIC SIGN DETECTION, TRACKING AND
RECOGNITION FOR ADVANCED DRIVER ASSISTANCE SYSTEMS**

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This paper describes a fusion work for traffic sign detection, tracking, and recognition. Such a fusion work is of major interest in the intelligent transportation systems. Existing methods concentrates on color based segmentation approaches and deep learning algorithms. However, these approaches focuses on single image detection and classification which is not applicable for real-time application. Unlike earlier work, a new fusion work is proposed, Where the camera is mounted on a moving vehicle under non-stationary environment for the traffic sign detection, tracking, and recognition. The fusion work contains an offline detector, online detector, and motion based model predictors which are used for efficient detection and tracking simultaneously. Finally, traffic signs are detected using ACF detector , tracked using kalman filter and classification is performed using KNN. Experimental results shows high detection and recognition accuracy comparing with (SVM) under non-stationary environments.