

## ABSTRACT

### THE KALMAN FILTER'S ROLE IN IDENTIFYING GPS POSITION AND VELOCITY

The Kalman filter is one of the most useful filters in estimating and predicting a system state if combined with a global positioning system. Together they can improve the position and velocity estimation for a moving object. This thesis discusses the importance of the Kalman filter in providing a less noisy and more accurate result, even in the loss of GPS signal reception that includes some of the essential data.

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