# Automatic Moving Target Recognition System using Seismic, Acoustic and Thermal Imaging

The developed system is a sensing module, which keeps on monitoring the perimeter and does a primary classification of moving targets such as vehicles, personnel using seismic, acoustic and thermal imaging sensor. On detection and classification of vehicle it generates command and prompts to take further appropriate action. The system process the recorded vibrations and event detection technique will be applied on the incoming signal for discriminating desired vehicle signature from background signal using advanced signal processing technique. On true detection, system starts recording the incoming signal and a data packet will be generated for feature extraction and further processing to primary classification as per the embedded intelligence to activate the necessary action. Seismic sensors are to be placed in areas where vehicle activities are expected or Region of Interest (ROI) where vehicle classification is required. The sensors will be installed in such a way that a vehicle entering ROI must trigger the system about 200m of range. The technology has significant utilization in the area of intrusion detectionon, force protection and border surveillance.
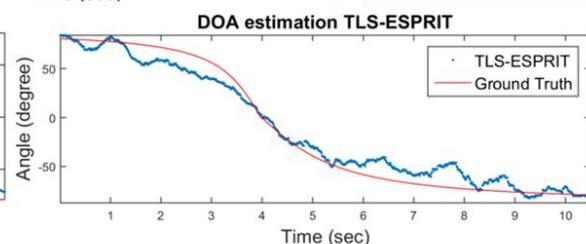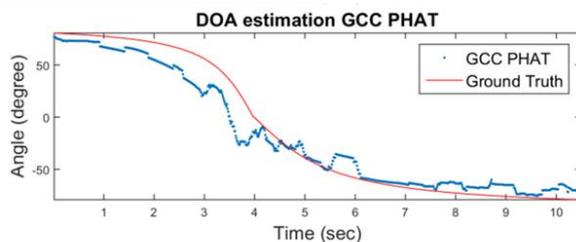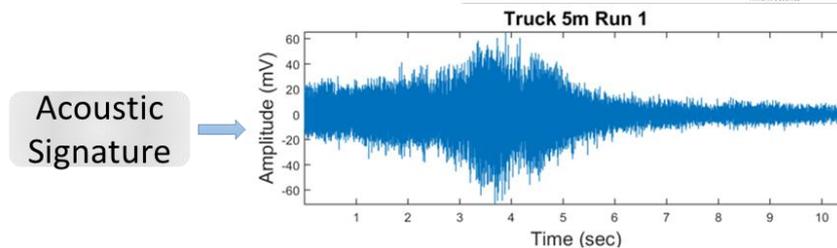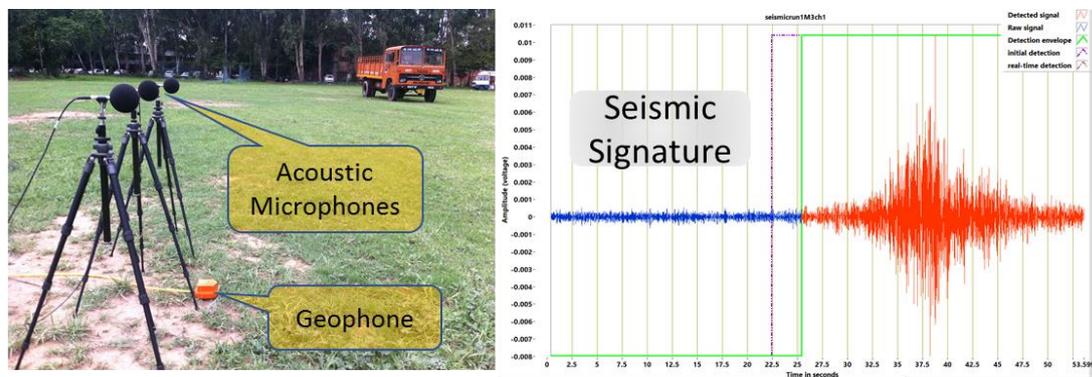
Automatic detection and classification of moving targets using thermal imaging modules