

## **ABSTRACT**

Nowadays the world faces security obstacles, the data can be accessed or penetrate easily. Thus we need to take care of our goods and gleanings through data monitoring and restoration.

One of trajectories that need data acquisition and collection is tracking system. In this project, the scope of work is to design and implement a real time vehicle tracker to mind the gap between rental offices and customers using (in-vehicle tracker) embedded in the car and Android application (ready-made) installed in a remote device or in centralized server. The system is contains two separated devices, one is (Linkit-One) which is connected with GSM/GPRS and GPS antennas and the other is a mobile phone operated by Android 4.4 OS or greater. During vehicle motion/stop its location update can be continuously reported using GPRS service and server. This information will be plotted using Google maps on the monitoring device/server. The system had been implemented and tested in real time. All the results had been achieved and recorded for future work. This thesis achieved real-time monitoring of location, speed in pre-defined area and permits alarming and option of getting out the zones under specific condition.