## **GeoSocInt: Geo-Spatial Social Intelligence**

## **Abstract:**

This project ventures into the realm of geographical information science to design a location based application that is contextually specific to develop functionality that is accessible and personal through innovating the software processing to improve the user experience. This project will review the boundary processing of large data sets through both hardware and software in order to seamlessly provide the user with personal information to enrich their lives. This investigation is not limited to just location services but the relevant ecosystems that are available to augment the user experience.

This research would encompass the designing of a mobile application that would track the location of devices opted-in a group plan, sync up individual calendar information for group events and provide notifications based on real-time traffic updates. Based on the location of the event members a push notification will be sent to notify the members about the time required to reach the event location. Critical time to arrive at the event will be updated. Geo-tagging of medical emergency centers on the group map processed based on the user's Insurance provider would be an added feature.

Provision of a secure, opted-in group location sharing platform, provision of notification and decision enablers based on real-time traffic analysis and event-calendar collaboration forms the backbone requirements of the application. The report will involve the realization of Multi-level Mapping and Traffic Marker Integration from a single level mapping and traffic marking. Multi-level Mapping would involve combining multiple user-maps on a single device, employing geofencing methodologies. Whereas multi-level traffic marking would involve processing real time traffic information of multiple users combined with event data and time to event analysis using algorithms.