# Title : Automatic Event Scheduling in Mobile Social Network Communities

Abstract:

In this project, we have implemented an autonomic system for activity scheduling in Mobile Social Network communities. We have implemented this, using Model II as described in the Research Paper. We have used Samsung Chord API for making network connections among the users who form a community. This API connects devices in a private channel and forms a group of people in a local area. Devices running Chord-based applications discover each other using a UDP(User Datagram Protocol) broadcast based discovery, and then use a TCP-based protocol stack to create a reliable, peer-to-peer local communication network. This network can be used to share data, including text, binary messages and files, with selected members of the network. Without using the cloud or server, it instantly supports sharing 1-to-1, 1-to-many or many-to-many.

According to Model II, when any user in the community proposes an event, a dynamic binary tree is created with the root node as the person proposing the event. The other members in the group act as nodes of the tree and data flows from parent to child nodes following the overlay. For this, an array is created and it contains the information about the position of all the nodes in the tree. This array is passed on to each node in the overlay along with the information about the event proposed. When this information reaches a node in the network, the user can respond accordingly, whether he/she wants to join the event or not. This response given by the user follows the same overlay structure and the responses finally reach the root node through the parent nodes. According to the responses generated, all the members are notified of the event.