SAN DIEGO STATE UNIVERSITY
*Leadership Starts Here*

# Anurag Dani

*Location Monitoring Application using iBeacon - Simulating Office*

## Abstract

Beacons are a technology that has taken the spotlight since its introduction and use by Apple, who adapted the name iBeacon under the Apple's protocol Beacon technologies. Being an Indoor Positioning System, iBeacons allow various businesses to advertise or market their availability to smartphone devices that are nearby. This set up allows the sending of messages regarding the services or goods as well as special offers to potential customers who pass by. Punch Clock is essentially an in/out tracking application. It is suited for Android Nexus 5 and it uses the principles of iBeacons and Geo-fencing to operate. It can be used in offices or any work station as an employee in/out tracker. It allows employers or business owners to keep track of who is at the workstation at a particular time. This is done through sending of push messages to those who are marked as in, based on the Android device that enters into the space within which the software operates.

## Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science
Alan Riggins, Department of Computer Science
Gary Girty, Department of Geological Sciences