

## **SDSU**

presents
a thesis defense for
Master of Science
degree in
Computer Science

Thursday, October 29, 2015

> 4:00 pm GMCS 405

## Pratyusha Uddaraju

IOS and Android Mobile Applications for Coral Identification Guide

## Abstract

Coral reefs in oceans are home for one of the most diverse underwater ecosystems known to humans. They support rich marine life, provide spectacular views, protect shorelines, form natural fisheries and contribute a noticeable share of revenue for the global economy. But pollution, climate change, rising CO2 & temperature levels in oceans cause an imminent threat to the life of underwater corals. The study of coral reefs and life forms they support is still in nascent stages and one such resource is the Coral Identification Guide. Sharing this knowledge and improving awareness of coral life and dangers they face is crucial for supporting a sustainable coral life in different countries across the world.

The most predominant means which people, researchers as well as general public, use to consume information/media today is smart phones. Smart phones and mobile devices are replacing personal computers as daily drivers for most of our day-to-day activities on the web. Mobile devices offer content to users via mobile applications or apps. Apple's iOS and Google's Android emerged as the dominant smart phone platforms accounting for 97% of mobile market share. The purpose of this work is to develop iOS and Android mobile applications for the Coral Identification Guide with exclusive details and an easy to use UI (User-Interface).

## Thesis Committee

Robert Edwards, Thesis Chair, Department of Computer Science Carl Eckberg, Department of Computer Science Forest Rohwer, Department of Biology