

## **SDSU**

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

Friday, May 2, 2014

1:00pm GMCS 418

## NachiketTanksale

GIS Tool on Fuel Resources of the American Continent

## Abstract

The motivation behind the development of this software is to employ current technology in the interest of an innovative education approach. Learning about the fuel resources, their distribution, production and usage is much more interesting when seen through images, fact sheets and videos.

A GIS tool for learning about fuel resources has been developed keeping in mind a student's and a common user's perspective. Though the idea of fuel production and consumption is very important for anybody, its knowledge in people is sadly lacking. All efforts have been made to design this software in such a way that it engages the users by using videos, images, short summary and quick links to get more information from html pages as well. Each of the geographic location types was established as a layer on a world map. According to the requirement, the layer created was a point layer or polygon layer or a line layer. This software can be customized according to the user's requirement and is easy to install and create using GIS technologies like MapObjects – JAVA edition and JAVA along with the Eclipse IDE

Attention is paid to each significant fuel, for each of Canada, Mexico and the United States. A large focus is on display of information using maps, since maps and geography are well known weaknesses in K-12 students.

## Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science Roger Whitney, Department of Computer Science Usha Sinha, Department of Physics