



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

Thursday,
November 13, 2014

1:00pm
GMCS 405

Swathi Artham

GIS Tool for California State Legislature Electoral History

Abstract

This application provides a summary of both California State Senate and California State Assembly election results along with different trends in a single GIS tool, from the years 1970 to 2012. Users can view the election results by selecting a particular year for Senate or Assembly, which results in adding a new map with a coloring scheme for better understanding of change of parties; red for Republicans, blue for Democrats and green for Independents. Users can click on the districts shown on the map using a hotlink tool to see the electoral trends for the past years.

This tool was designed to help students, and teachers to interactively learn about the California State Legislature elections. This application provides a powerful SQL query option to enter queries and get election results in the form of tables. This application also provides quiz and various visual statistics using graphs, tables, and color matrix tables.

This tool was developed in JAVA swing and AWT, MOJO (Map Objects Java Objects), Apache Derby, DBF Explorer, HTML5, CSS3, and JavaScript.

Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science
William Root, Department of Computer Science
Carmelo Interlando, Department of Mathematics & Statistics