

SDSU

presents a thesis defense for Master of Science degree in Computer Science Monday, October 19, 2015

> 12:00pm GMCS 418

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Electric Vehicles Charging Stations

Abstract

The thesis is focused on creating a GIS tool showcasing analysis and interpretation of the Electric Vehicles Charging Stations and the statistical analysis of electric vehicles in USA. This tool is developed using the Google maps which shows the locations of the EV Charging stations and the number of charging outlets in a particular state. I used Marker Clustering utility to manage multiple markers at the different zoom levels. The states with more clusters are differentiated by using the different color. The application also uses interactive features to display the statistical analysis of the charging outlets, electric vehicles sales and automobile manufacturers in the form of different types of charts like pie chart, bar chart, clustered charts. The UI is made very responsive using JavaScript libraries, JQuery, HTML5, CSS. To make the user understand more easily videos and pictures are embedded. The historical evolution of EV charging stations is explained using the Timeline feature.

Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science Alan Riggins, Department of Computer Science Mark Dunster, Department of Mathematics & Statistics