

SDSU

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

Wednesday, September 16, 2015

> 12:00pm GMCS 418

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Workforce Prediction

Abstract

The aim of the thesis is to find the impact of factors like Labor force participation, Government debt to GDP, GDP, Labor costs, Inflation Rate, and Job vacancy on Unemployment rate using Regression model of the R language and to predict the Labor force participation and Job vacancies for the upcoming years using two R models – ARIMA model and Holt winters model. 4 places have been targeted - United States of America, Germany, China and Singapore.

A Web application has been designed using JavaScript, JQuery, HTML, CSS, and JSON and the predicted values of Labor force participation and Job vacancies for each place are plotted on an interactive world map.

Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science Alan Riggins, Department of Computer Science Ming-Hsiang Tsou, Department of Geography