

UROP Projects for the 2007-2008 Academic Year

Student: Madhur Lamsal

Sponsor: Brady West, CSCAR; UM-Ann Arbor

Title of UROP Project: Quantitative Methods for the Prediction of College Football Bowl Outcomes and the Development of Ratings for College Football Teams

Project summary: The purpose of this project was to develop a statistical model that could be used in future college football seasons to 1) make accurate predictions of college football bowl game outcomes, and also 2) develop ratings for bowl-eligible college football teams based on predictions of success against all other bowl-eligible teams (a hypothetical round-robin playoff scenario).

Student: Suyash Joshi, Craig Gagel

Sponsor: Dr. Yener Kandogen, School of Management

Title of UROP Project: Analysis of Variation in Quality of Exports and Imports

Project summary: This study analyzed the distribution of unit values in maintaining exports and imports to see if the results are consistent with competing international trade treaties. Regression analysis was used to check the correlation between values and imported/exported income and time, where the dependent variables will be unit values of exports, imports, as well as the standard deviation of those variables.

Student: Cheng Yuan, Anthony Howell

Sponsor: Dr. Suleyman Uludag, Computer Science

Title of UROP Project: NS2 Simulation Package Software Development

Project summary: The purpose of this study is to develop software simulations in NS2 for testing QoS routing algorithms. The results of the study will be submitted to a journal for publication.

Student: Bethanny Smith

Sponsor: Dr. Diane Schaefer, Sociology

Title of UROP Project: Graffiti Playground

Project summary: This is a pilot study that examines playground graffiti.

Student: Elizabeth Kusky

Sponsor: Dr. Kathryn Schellenberg, Sociology

Title of UROP Project: What They Say: Stereotypes and Contested Terrains of the United Arab Emirates Labor Market

Project summary: This study examines how members of competing labor market constituencies explain the absence of UAE nationals from the private sector.

Student: Leah Gebhart

Sponsor: Dr. Jacob Blumner, Writing Center

Title of UROP Project: Redefining the Tutorial: A Study of Basic Writers at UM-Flint

Project summary: The purpose of this project was to study UM-Flint's Basic Writing Program, to compare it to national standards, and to present the findings through print and presentation.

Student: Shuba Kalappa, Sravanthi Pasupathy, Dhruba Baishya, Suhasini Patel

Sponsor: Dr. Quamrul Mazumder, Engineering

Title of UROP Project: Globalization of Engineering Education

Project summary: This project evaluated whether current engineering education curriculum of the USA is adequate to prepare graduates for a global engineering environment.

Student: Michael Howart, Brendan Yonke

Sponsor: Dr. Jie Song, Chemistry

Title of UROP Project: Theoretical Studies on PNA Monomers

Project summary: Peptide nucleic acid (PNA) has received a large number of experimental and theoretical interests recently, due to their unique structures. However, our understanding of electronic structures and chemical properties are limited; especially when the structure is modified with a different functional group. In this study, theoretical methods will be applied to several PNA monomers; and their structures and properties will be elucidated.

Student: Dhruba Baishya

Sponsor: Dr. Heather Seipke, Communications

Title of UROP Project: The Legacies Project

Project summary: The goal of this project is to connect high school students with senior citizens by having students conduct a life narrative / Oral History of a local senior citizen (most likely in assisted living or a nursing home). The project will document the entire process and the legacies (oral history) of the seniors to produce a documentary film series appropriate for PBS.

A secondary goal of the project is to collect good data from the interviews with the seniors for analysis and manuscript production.

Student: Ruirui Jiang, Dhruba Baishya

Sponsor: Dr. Tzee Ed Chow, Earth and Resource Science

Title of UROP Project: Using Maps API for Web Mapping

Project summary: The purpose of this research is to assess the potential of the Maps APIs for developing Internet GIS applications. This study suggests a conceptual model to explore and extend the existing functionalities of Maps API to access and visualize geographic data. This research will employ a Maps API to develop a web prototype that disseminates geographic data around UM-Flint campus. The web prototype illustrates great potential for developing Internet GIS solutions around open specification through the Maps API. While this work will provide the UM-Flint community a practical tool to explore the campus, it also sheds new insights in the future development of Maps APIs for Internet GIS applications.

Student: Ruirui Jiang, Tim Jagielo

Sponsor: Dr. Heather Seipke, Communications

Title of UROP Project: Relating and Interacting: An Introduction to Interpersonal Communication

Project summary: I am updating an Interpersonal Communication text book that was published in 1982. The current text is very out of date and several new chapters need to be added. The graphics also need to be updated. I also need to create an instructors manual and student workbook. I need help with updating sources and making sure all of the sources are documented correctly as well as referenced correctly in the text. Mostly, I want a student perspective on the organization and flow of everything. The content of the book would be of interest to students studying Communication, Social Work, Psychology, Sociology, Language, Education and many other disciplines. This subject matter is quite interdisciplinary and is very applicable to most areas of study.