Purpose

The Wharton GIS Lab and CSISS, Center for Spatially Integrated Social Science, -- an NSF funded initiative located at University of California Santa Barbara -- are pleased to announce a special summer workshop scheduled for August 29-31, 2001. The goal of this 3-day workshop is to provide an overview and introduction to the range of statistical techniques used in the analysis of geographic data in social science research. With the exponentially growing use of geographic information systems (GIS) to store, manipulate, and visualize geocoded information, it is increasingly important to understand the particular nature of geographic data and the specialized statistical techniques required for its analysis in social science research. In addition an overview of the main methodological issues and most commonly used test statistics, an important component of the Workshop is a lab-based, hands-on experience in the use of a range of software tools such as SpaceStat and various extensions of commercial GIS products including ArcView.

Prerequisites include a familiarity with multivariate statistics and basic concepts of probability theory, as well as some knowledge of desktop GIS software. This workshop is designed for graduate students and professionals in the social sciences who are interested in expanding their knowledge in GIS and spatial analysis. The workshop will also assist with the development of a spatial perspective to individual research projects.

Workshop Agenda

Wednesday, August 29

12:00p.m. - 7:00p.m. Registration
. 1:30p.m. - 3:00p.m. Introduction to GIS in social science research (Optional)
3:00p.m. - 3:30p.m. Break
3:30p.m. - 5:00p.m. Group Discussion: “Individual Research Projects and GIS” (Optional)
5:30p.m. - 7:00p.m. Reception

Thursday, August 30

8:00a.m. - 9.30a.m. Opening session
9.30a.m. - 10:00a.m. Overview of spatial analysis
10:00a.m. - 10:30a.m. Break
10:30a.m. - 12:00p.m. Methods and applications of spatial analysis
12:00p.m - 1:30p.m. Lunch and Group Discussion
1:30p.m. - 3:30p.m. Lab exercises
3:30p.m. - 4:00p.m. Break
4:00p.m. - 6:30p.m. Group Discussion: “Application of spatial methods to individual projects”
7:00p.m. - 9:00p.m. Dinner and Panel Discussion "Emerging Trends in the GIS Science"

Friday, August 31

8:30a.m. - 9:45a.m. Exploratory spatial data analysis
9:45a.m. - 10:00a.m. Break
10:00a.m. - 11:00a.m. Spatial Autocorrelation
11:15a.m - 12:30 a.m. Introduction to Spatial regression analysis
12:30p.m. - 1:30p.m. Lunch and Group Discussion
1:30p.m. - 3:30p.m. Lab exercises
3:30p.m. - 4:00p.m. Break
4:00p.m. - 6:00 p.m. Individual consultation with Instructors

Presenters

The workshop faculty includes Dr. Michael Goodchild, Director of Center for Spatially Integrated Social Science (CSISS) and a Professor of Geography at the University of California at Santa Barbara; Dr. Luc Anselin, a member of the CSISS Executive Committee and a Professor of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign; Dr. Susan M. Wachter, Professor of Real Estate and Finance at The Wharton School of the University of Pennsylvania and Director of the Wharton GIS Research Lab; Paul Amos, Senior Research Director of the Wharton GIS Research Laboratory at the University of Pennsylvania; and Dr. Ayse Can Talen, Senior Director for Community Development Research at the Fannie Mae Foundation.

Lodging Information

The Inn at Penn
3600 Sansom Street
Philadelphia, PA 19104
(800) 809-7001

University City Sheraton
36th Street and Chestnut Street
Philadelphia, PA 19104
(215) 387-8000

Penn Tower Hotel
Civic Center Boulevard. and 34th Street
Philadelphia, PA 19104
(800) 356-PENN

Further Information

For further information, please contact Paul Amos at amosp@wharton.upenn.edu or call (215) 898-4256 or visit the Wharton GIS Lab website at http://gispdc.wharton.upenn.edu