



Association of American Geographers Spatial Analysis and Modeling (SAM) Specialty Group Newsletter

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FROM THE CHAIR

Greetings SAM members.

I wanted to take this opportunity to update you on SAM activities held at the recent AAG meeting in San Francisco. SAM was quite visible, sponsoring twenty-six paper sessions, including two student paper competition sessions. In the 2007 student paper competition, Qiang Cai from University of Iowa took 1st prize while the 2nd prize was shared by David Wheeler and Youngho Kim, both from Ohio State University.



In addition, we sponsored four panel sessions and a plenary session. I attended the SAM-sponsored panel sessions honoring the work of Atsu Okabe, and the plenary lecture featuring Luc Anselin. Both sessions drew large audiences. As in previous years, the plenary session was organized by Alan Murray, Editor of *Geographical Analysis*. A reception sponsored by *Geographical Analysis* followed the plenary session. Thanks to Alan for his continued support.

Two new board members were elected at the SAM business meeting. SAM welcomes Ed Zolnik (George Mason University), who will fill the vice-chair/treasurer seat previously held by outgoing member Fahui Wang (Louisiana State University). SAM also welcomes Ningchuan Xiao (Ohio State University), who replaces outgoing board member Phaedon Kyriakidis (University of California-Santa Barbara). I'd like to thank the departing board members for their service to SAM, especially Fahui Wang, who managed our student paper competition and finances during his term. See the final page of the newsletter for all positions.

Lastly, it is never too early to start thinking about possible sessions for the 2008 AAG meeting in Boston. We will be happy to post calls for papers to the SAM web site, as well as circulate them over the SAM list serve.

Best wishes,

Mark W. Horner
Assistant Professor
Department of Geography
Florida State University

NOTEWORTHY

Igor Vojnovic (associate professor of geography at Michigan State University), Joe Messina (assistant professor of geography at Michigan State University), Ellen Velie (associate professor of epidemiology at Michigan State University), June Thomas (professor of planning at Michigan State University), Kami Pothukuchi (associate professor of planning at Wayne State University), Bruce Pigozzi (professor of geography at Michigan State University), Joe Darden (professor of geography at Michigan State University), and Daniel Griffith (Ashbel Smith Professor, University of Texas at Dallas) received a Human and Social Dynamics, National Science Foundation grant of \$643,964 in support of a collaborative research project entitled "The Social Dynamics of Accessibility, Travel Behavior, and Physical Activity: An inner city/suburb comparison in the Detroit region." Vojnovic, along with Pigozzi, Velie, Messina, and Darden also received \$110,000 from the Land Policy Institute and the Community Vitality Program, Michigan Agricultural Experiment Station, and Michigan State University for the research project "The Conditioning of Accessibility and Pedestrian Activity by Income, Race, Age, and Gender: Exploring the Lansing Capital Region."

Russell G. Congalton (University of New Hampshire), Alan M. Mikuni (USGS), and Nancy K. Tubbs (USGS) have been named the 2007 ASPRS Fellow Award winners, conferred on active Society members who have performed exceptional service in advancing the science and use of the mapping sciences of photogrammetry, remote sensing, surveying, geographic information systems, and related disciplines.

Doug Reardon, associate professor of geography at Coppin State University, was recently awarded a \$186,000 grant from National Aeronautics and Space Administration's Applied Sciences Program for "The Middle Passage Project." Reardon's project will use remote-sensing and GIS for studies in Ghana, Barbados and St. Kitts that promote the conservation of UNESCO World Heritage sites and historic landscapes that were significant in the slave trade across the middle Atlantic.

Marshall Shepherd, associate professor in the geography/atmospheric sciences program at the University of Georgia, received two grants from the

National Aeronautics and Space Administration (NASA) totaling nearly \$500,000 through 2010. The grants support research on the human impact on the precipitation component of the water cycle using advanced satellite, numerical modeling, and ground-based data.

NEWS

SAM Specialty Group. At the 2007 Annual Meeting of the AAG held in San Francisco:

- SAM sponsored or cosponsored a total of 26 sessions;
- SAM sponsored a plenary lecture by Anselin of the University of Illinois. Alan Murray organized a reception sponsored by *Geographical Analysis* after the lecture;
- As noted above, Ed Zolnik (George Mason University) will fill the vice-chair / treasurer position and Ningchuan Xiao (Ohio State University) is a new board member

The **GIS&T Body of Knowledge** has been finalized by the University Consortium for GISc and published by the AAG. The Model Curricula is a vision of how higher education should prepare students for success in the variety of professions that rely upon geospatial technologies. Central to that vision is a comprehensive Body of Knowledge that specifies what aspiring geospatial professionals need to know and be able to do. Since 1998, scholars from many of the more than 80 institutions that UCGIS represents have contributed to the Geographic Information Science and Technology (GIS&T) Body of Knowledge. Details at <http://www.ucgis.org/priorities/education/modelcurriculumproject.asp>

CALLS

The AAG wishes to create a feasibility and design plan for a **Latin American Center of GIS&T Innovation in Transportation and Logistics for Economic Development**. The center will focus on applying GIS&T to transportation logistics in Latin America. The AAG seeks researchers in these areas to participate in generating the plan. Interested persons should send an email in Spanish or English to Dr. Patricia Solís at psolis@aag.org along with the following items: 1) a letter of interest indicating those sets of activities in which the individual would like to participate and elaborating his/her potential

contributions; 2) a biographical sketch highlighting expertise in the subject; and 3) a full curriculum vitae. Priority will be given to those expressions of interest received by August 17, 2007. See the May 2007 AAG Newsletter for more details.

2007 International Joint Conference on Neural Networks, Orlando, Florida (August 12-17, 2007). Sponsored by the International Neural Network Society and co-sponsored by the IEEE Computational Intelligence Society. It covers all topics in neural network theories and applications. IJCNN 2007 will feature plenary speakers, special sessions, moderated panel discussions, pre-conference tutorials, post-conference workshops, regular technical sessions, poster sessions, and social functions. For further information see: <http://www.ijcnn2007.org>.

Second World Congress in Social Simulation, Fairfax, Virginia (July 14-16, 2008). Hosted by the Center for Social Complexity at George Mason University. The WCSS series is a joint collaboration of the regional international professional organizations: European Social Simulation Association ESSA; North American Association for Computational Social and Organizational Sciences NAACSOS; and Pacific Asia Association for Agent Based Social Systems Science. Details to follow in subsequent announcements.

First IEEE International Conference on Self-Adaptive and Self-Organizing Systems, Boston, Massachusetts (SASO 2007) (July 9-11, 2007). Sponsored by IEEE Computer Society and Technical Co-Sponsors ACM SIGOPS, ACM SIGART, IEEE SMC Society. Details at <http://projects.csail.mit.edu/saso2007>.

First International GIS Crime Mapping conference, Brussels, Belgium (September 25-26, 2007). The conference provides a multitude and broad variety of real life case studies from police, government departments, local councils, fire and ambulance and other partnership agencies who are currently utilizing GIS for collecting data at crime locations, targeting responses and deploying resources, generating intelligence products, sharing information, reassuring the public and vitally, reducing crime. Details at <https://kb.iqpc.co.uk/events/3801/topic/11>.

ESRI User Conference, San Diego, California (June 18-22 2007). The ESRI UC is unlike any other event. It's the largest conference in the world devoted to GIS. Users from more than 120 countries come to learn new skills, share information and discover best practices and tips and tricks that they can instantly use. Details at www.esri.com/events/uc/index.html.

GeoWeb2007 Conference, Vancouver, British Columbia, Canada (July 25-27, 2007). GeoWeb 2007's principal theme, "From Mashups to Infrastructure," reflects the breadth, the evolution and the growing maturity of the GeoWeb. This theme acknowledges the highly visible, consumer applications that helped spawn the GeoWeb while emphasizing that the GeoWeb is increasingly playing a meaningful role in mainstream, mission-critical applications. As such, the GeoWeb is now a key component in critical decision making across a broad spectrum of market segments and application domains. Details at http://geoweb.org/2007/email_pr_cfp.htm.

3rd International Conference on Environmental Science and Technology, Houston, Texas (August 6-9). The objective of the Third International Conference on Environmental Science and Technology will be to provide a major interdisciplinary forum for presenting new approaches from relevant areas of environmental science, to foster integration of the latest developments in scientific research into engineering applications, and to facilitate technology transfer from well-tested ideas into practical products, waste management, remedial processes, and ecosystem restoration. Details at www.aasci.org/conference/env/2007/index.html.

NSF grants in **Geomorphology and Land Use Dynamics** are due July 16, 2007 and January 16, 2008. For more details, see: www.nsf.gov/funding/pgm_summ.jsp?pims_id=13690.

National Science Foundation **Doctoral Dissertation Research Improvement Proposals** are due throughout the year. See more at www.nsf.gov/funding/pgm_summ.jsp?pims_id=13453.

EMPLOYMENT

GEORGIA, ATLANTA. Georgia Institute of Technology, College of Architecture, Center for GIS. **Research Scientist/Engineer I or II.** The Georgia Institute of Technology, Center for Geographic Information Systems in the College of Architecture in Atlanta, Georgia is seeking one or more Research Scientists at the level of Research Scientist/Engineer I or II. The GIS Center applies a variety of spatial analysis technologies in urban planning, engineering and scientific research, creates data sets for specific applications and develops GIS-based software tools to meet specific challenges. The successful candidate will have strong skills in one or more of the following areas: GIS application programming, remote sensing, Internet and Open Source GIS software and urban and environmental modeling. Applicants with experience in applying these technologies to transportation, land use or environmental areas are preferred. The successful applicant will be expected to perform advanced GIS analysis, write grant proposals and technical reports and manage graduate students. A Masters degree in is required; an earned Ph.D. is preferred. Salary is commensurate with experience. Apply: Applicant review will begin April 15, 2007 and continue until suitable candidates are found. The following materials should be submitted: (1) Cover letter describing your research interests and experience, (2) curriculum vitae, and (3) names and contact information for three references. Send application material to Steven P. French, Director, Center for Geographic Information Systems, Georgia Institute of Technology, 276 Fifth St. NW, Atlanta, GA 30332-0695. Fax: (404) 385-0450. Georgia Tech is an equal education/opportunity employer.

IDAHO, MOSCOW. Graduate opportunities in **Polar Remote Sensing** at the University of Idaho. **Two research assistantships** (MS, PhD) are currently available to study Arctic and Antarctic clouds through funding from the National Science Foundation. The MS project will infer the seasonal cycles of cloud microphysical properties and cloud radiative forcing over Antarctica. The PhD project will be part of the International Polar Year and will increase fundamental understanding of both temporal and spatial variability of Arctic clouds by investigating: a) the macro- and microphysical properties of clouds at various locations in the Arctic, b) how the spatial and temporal variability of

Arctic cloud properties depend upon regional forcing parameters, and c) if satellite retrievals yield similar cloud properties and variability to coincident surface-based measurements. Familiarity with Linux and Matlab are desired, but not essential. Suitable candidates will have a solid background in geography, meteorology, or a related geoscience field. Students will have the opportunity to receive a degree in either Environmental Science or Geography. The positions provide full support at \$20,000 to \$22,000 annually, plus tuition and benefits. Apply: contact Dr. Von P. Walden (vonw@uidaho.edu), 208-885-5058, or visit <http://www.uidaho.edu/~vonw> for more information.

MONTANA, BOZEMAN. Assistant Professor, Geospatial Analysis. The Department of Land Resources and Environmental Sciences at Montana State University seeks a talented and enthusiastic individual for a tenure track faculty position who will provide leadership in the department's research and teaching programs related to geospatial analysis. The candidate should have research training in the integration of GIS and other spatial analysis approaches within the natural resources / environmental sciences fields. Apply: the full position announcement and application instructions are at: <http://www.montana.edu/level2/jobs.html>. Screening will begin April 23, 2007 and continue until a suitable applicant is found. Montana State University is an equal opportunity employer, ADA/EO/ AA/VETERAN'S PREFERENCE.

SPECIALTY GROUP ANNUAL REPORT FOR 2006/2007

Transitions

With the election of the new Chair, Mark W. Horner, the SAM web page was moved from George Mason University to Florida State University (FSU). Thanks go to David Wong, outgoing Chair, for his assistance with the transition. The new SAM web pages are hosted by the Department of Geography at FSU. Graduate student Joni Downs will help maintain the SAM web pages.

National Meeting

SAM will be quite visible in San Francisco, CA at the AAG Annual Meeting, April 17-21, 2007. Twenty-six (26) paper sessions are sponsored or co-

sponsored by SAM. This compares to thirty-one (31) paper sessions in 2006 and 24 in 2005. These paper sessions include two Student Paper Competition sessions organized by Vice Chair/Treasurer, Fahui Wang. A total of 122 papers will be in sessions under the SAM category, as compared to 154 papers in 2006 and 94 in 2005. In addition, there are four panel sessions planned (up from three panel sessions last year) and a plenary session. This year, we did not have enough entries to organize the Emerging Scholar Paper Competition. Also, the Chair organized two sessions. The vast majority of sessions were organized by SAM members, which reflects our high participation rates.

As in previous years, the plenary session has been organized by Alan Murray, The Ohio State University and Editor of *Geographical Analysis*. The plenary speaker will be Luc Anselin of the University of Illinois. The reception after the plenary session will be sponsored by *Geographical Analysis*. Thanks to Alan for his continued support.

Elections

At the business meeting of the Annual AAG meeting in San Francisco, SAM will elect new officers for the following positions:

- Vice Chair/Treasurer – Fahui Wang’s term expires 2007
- Board member – Phaedon Kyriakidis’ term expires 2007

The Chair sent notice to SAM members in mid February 2007 regarding these upcoming vacancies. Nominations for these positions are being taken until the San Francisco meeting. Following usual procedure, nominees will attend the SAM business meeting in San Francisco, where they will introduce themselves to the membership and discuss their potential contribution(s) to SAM and the broader AAG. Upon discussion of all candidates and their qualifications, a vote will be taken.

Subcommittees

Two important subcommittees formed in 2005 continue to perform key tasks for SAM.

- Communication Subcommittee: Steve Manson (U. Minnesota), Chair; Edmund Zolnik (George Mason University); Tony Grubestic (U. Indiana).

- Paper Competition Subcommittee: Fahui Wang (Northern Illinois U.), Chair; Mark Horner (Florida State U.) and Scott Bridwell (U. Utah)

The Communication Subcommittee has taken charge of communications issues among SAM members, and the Paper Competition Subcommittee organizes paper competitions at all levels.

Newsletters

Thanks to the members of Communication Subcommittee for reviving the SAM newsletter. The first new issue was published at the end of 2005, and 2-3 issues a year have been published since. Issues are available on the SAM website.

Membership and Participation

2007 – 708 (Mar. 1, AAG SG Website: 327 Student Members, 381 non-student members)
 2006 – 750 (Feb 28, AAG SG Website: 413 student members, 337 non-student members)
 2005 – 716 (according to the AAG mailing list)
 2004 – 200
 2003 – 427 (unofficial)
 2002 – 366
 2001 – 261
 2000 – 204
 1999 – 219
 1998 – 244
 1997 – 285
 1996 – 339
 1995 – 309

Current balance: \$ 3,517.45 (3/5/2007)

Discussion Item

Encouraging Undergraduate SAM Participation. SAM issued calls for papers for the 2007 meeting which included an expanded student paper competition. Specifically, SAM members structured the call to include sessions featuring the work of undergraduates. However, there was not sufficient response to the call such that holding a competition was possible. The Chair of SAM wishes to discuss approaches for attracting student interest with other members at the annual business meeting.

Respectfully submitted,
 Mark W. Horner
 March 7, 2007

INFORMATION

Mission Statement

Our mission is to foster and maintain interaction, cooperation and community among individuals interested in the analysis of geo-referenced data, modeling of spatiotemporal processes and the use of analytical and computational techniques in solving geographic problems. The specialty group promotes the scientific study of physical, environmental and socioeconomic geography and the development, use and teaching of analytical cartography, geographic information systems (GIS), remote sensing, spatial statistical, mathematical and computational techniques for spatial analysis.

Membership Dues

Regular: \$3
Student: \$1

Submissions

This newsletter reaches a large number of readers and is therefore an excellent venue for getting the word out on community news, departmental happenings, research findings, media appearances and the like. It is also a good place to post calls for proposals, awards, grants, fellowships, jobs and professional development opportunities. We also invite you to submit commentaries or features of broad interest to specialty group members. The newsletter relies on volunteers to submit articles, so please take a moment to send along relevant items.

Please send your submissions to:

Ningchuan Xiao
SAM Newsletter Editor
Department of Geography
The Ohio State University

at xiao.37@osu.edu in text or rich text format. Photos or other images, with captions in an attached text file, are also welcome (GIF, JPG or PNG).

Officers

Chair

Mark Horner

Department of Geography
The Florida State University
Tallahassee, FL 32306
Email: mhorner@fsu.edu
Term Expires: 2009

Vice Chair/Treasurer

Ed Zolnik

Department of Geography
George Mason University
4400 University Drive,
Fairfax, VA 22030
Email: ezolnik@gmu.edu
Term Expires: 2010

Board Members

Steven Manson

Department of Geography
University of Minnesota
414 Social Sciences
267 19th Avenue South
Minneapolis, MN 55455
Email: manson@umn.edu
Term Expires: 2008

Darla Munroe

Department of Geography
The Ohio State University
1123 Derby Hall
154 North Oval Mall
Columbus, OH 43210
Email: munroe.9@osu.edu
Term Expires: 2009

Ningchuan Xiao

Department of Geography
1036 Derby Hall, 154 North Oval Mall
The Ohio State University
Columbus, OH 43210
Email: xiao.37@osu.edu
Term Expires: 2010

Student Representative

Scott Bridwell

Department of Geography
University of Utah
Salt Lake City, UT 84112
Email: scott.bridwell@geog.utah.edu
Term Expires: 2008