Space-Time Integration in Geography and GIScience

Every year, the Association of American Geographers (AAG) identifies a particularly timely or relevant set of themes to feature during its Annual Meetings. Last year an over-riding theme was climate change, for example, and previous years have included featured sessions on topics on as human rights, landscape and literature, sustainable development in Africa, geography of water, and many other topics.

Among several special themes at its upcoming Annual Meeting in Seattle, April 12-16, 2011, will be multiple sessions focused on the research status, recent advances and research needs of space-time integration, modeling and analysis in geography and GIScience. This special set of invited papers will feature many leading GIScience researchers from Asia and Europe as well as from other regions of the world, and will form a three-day high-profile symposium within the AAG Annual Meeting.

Space-time analysis is a rapidly growing research frontier in geography, GIS, and GIScience. Advances in integrated GPS/GIS technologies, the availability of large datasets (over time and space), and increased capacity to manage, integrate, model and visualize complex data in (near) real time, offer the GIS and geography communities extraordinary opportunities to begin to integrate sophisticated space-time analysis and models in the study of complex environmental and social systems, from climate change to infectious disease transmission.

This special symposium builds on momentum from a space-time analysis workshop cosponsored by the AAG, ESRI, the University of Redlands, and University of Southern California in early 2010, as well as several other initiatives during the past few years. Geographers, GIScientists, modelers, computer programmers, GPS/GIS systems scientists, climate change scientists, epidemiologists, ecologists, planners, transportation experts, and others with research expertise in integrating space–time in GIS and geography are encouraged to participate in this special symposium.

The AAG welcomes paper abstracts in the following areas.

- Research advances and needs in space-time analysis and representation, such as:
  - collaborations among GIScientists and modelers (systems, agent-based, network, etc.)
  - real-time GPS/GIS interactive systems
  - technological challenges and R&D needs
  - visualization of space-time in GIS
  - sharing discoveries and results with decision-makers
  - integrating analysis and results into web 2.0
  - dealing with lag effects in space and time
  - ontological frameworks
  - qualitative space-time analysis
  - temporal scale and event representation
  - historical time and HGIS
  - computational algorithms
  - analytical tools for time constrained decision support systems
  - sensor integration
  - 3-D or 4-D representations of time and space interactive data
  - real-time geographic management systems
  - uncertainty analysis
  - community or participatory GPS/GIS and related systems (including “VGI”)

- State-of-the-Art applications of space-time modeling and analysis in areas such as:
  - climate change response and adaptation
  - species migrations and habitat connectivity

Continued on page 4
AAG Welcomes Two Summer Interns

The AAG has welcomed two new interns to Meridian Place this summer. Christina Elder is an undergraduate with a double major in geography and international affairs at the University of Mary Washington. Mark Revell graduated from George Washington University in May 2010 with a master's degree in geography.

Christina’s studies emphasize cultural and political geography with a concentration in the Middle East. Her interests include languages, ethnic diasporas, social justice, and society in relation to geography. After graduation she eventually hopes to travel, study, and document communities of African descent in the

Middle East. She’d also like to work in the government or non-profit sector with an international focus. While working as an intern for the AAG, Christina has assisted with research for the Annual Meeting, helped to update the website, assisted with newsletter production, and provided support for grants and contracts.

Mark’s focus is on urban geography with emphasis on land use/urban planning and urban sustainability. He would like to pursue a career in policy or research for a government agency or non-profit organization in Washington, D.C. This summer, Mark is assisting with a variety of geography education projects including the EDGE program, working on the careers database, updating member profiles, and assisting with other AAG projects.

From the Meridian continued from page 2

– marine environments (oil spill impacts, other persistent pollution, fisheries, ocean transport)
– hydrology (flows and observations)
– location-based services (LBS)/mobile GIS/navigation
– health (epidemics, disease transmission)
– disaster response, crisis mapping
– crime analysis and mapping
– dynamics of urban renewal/decay
– dynamics of the global financial system
– wars, revolutions, and military activities
– flows of labor and trade in a global economy
– transportation (information, materials, people)
– refugee populations

• Education and the GIS workforce using space-time analysis, such as:
  – Needs of business, nonprofit, governmental, and academic organizations for expertise
  – Opportunities and pathways to educate geographers and GIScientists (students to mature GIS professionals) in new research techniques, tools, and concepts

If you are interested in presenting a paper or poster in this Time-Space Research Symposium, please go to www.aag.org, to register for the conference and submit your abstract by October 15, 2010. Indicate “Temporal” as one of your keywords. Also email a copy of your abstract submission page to Megan Overbey at moverbey@aag.org.

For more information on the symposium, see www.aag.org/giscienceresearch, or contact Jean McKendry at jmckendry@aag.org. Initial organizers of the symposium include Mike Goodchild, Doug Richardson, Mei-Po Kwan, Luc Anselin, Michael Gould, Elizabeth Wentz, and Jean McKendry.

In addition to this featured Space-Time Research Symposium, other special themes of the AAG Seattle meeting will include session tracks focused on Asian Geographies and Research Collaborations; on Geography and Public Health; on Diversifying our Discipline, and on Geography Education and the Changing Role of Universities in today’s globalizing societies. These and hundreds of other cutting edge research and educational sessions will be organized by the AAG, its members and its specialty groups in the months ahead for the AAG Seattle meeting. The AAG Annual Meeting, with 8,000 attendees from over 60 countries, is one of the most dynamic, substantive, and innovative geography research and scholarship events in the world. I hope you will join us in 2011 in Seattle, one of my favorite cities.

Doug Richardson
drichardson@aag.org

Honorary Geographer Nominations

Nominations for the 2011 AAG Honorary Geographer are now being solicited. Each year, this designation recognizes excellence in research, teaching, or writing on geographic topics by a non-geographer. Nominations should include the complete name and address of the nominee and a concise (500 words maximum) yet specific description of the accomplishments that warrant the nominee’s selection as an AAG Honorary Geographer. Biographical and bibliographical information not included in the statement should not exceed six additional pages of text. Digital submissions to grantsawards@aag.org are preferred. For more details and a listing of past AAG Honorary Geographers, see www.aag.org/cs/honorary-geographer. Nominations are due no later than September 15, 2010.