

Francis Harvey & Shashi Shekhar
Minnesota Futures 2008/09
Geo-informatics Futures Symposium 1/29 - 1/31/2009
Report submitted 2/28/2009

SYMPOSIUM REPORT

Overview

We provide this report to cover some key activities of the symposium, preparation, follow-up and some initial assessment. The symposium "Exploring Spatial-Temporal Futures of Geo-Informatics" took place from 1/29 - 1/31/2009 in the Digital Technology Center located in Walter Library. Up to 44 participants took part in presentations, discussions, informal networking, and panel discussion. The networking component was especially valuable as researchers from across the University and a small number of external participants found a rare opportunity to present, learn, and discuss ongoing research activities and perspectives on future research. Follow-up activities in the works are developing at least five proposals. Pre-symposium activities were instrumental in connecting a core group of GIS-interested faculty and developing a vibrant symposium organization.

Symposium Background and Preparation

On 8/8/2008 we received notice from OVPR that our MN Futures proposal had been approved. Being summer, we were unable to meet immediately, but the two lead proposers did begin over email to discuss the proposal activities. The key decision was made to hold the symposium at the end of January 2009 and to involve a group of key people in the preparation of the symposium. Proposed times for meeting we're sent to this planning group and we met for the first time on 19 September.

At the first meeting we reviewed the proposal and discussed the general organization. Taking the OVPR's guidelines to heart, we sought to emphasize on networking style activities. A meeting with Frances Lawrenz was scheduled to refine our understandings and help prepare a symposium best suited to the intents of the MN Futures program. That meeting underscored our sense that the symposium should focus on bringing researchers from the university, in its broadest sense, together with interested individuals from the region. The goal, as we understood it, was to engender new conversations.

With the planning group we discussed different symposium organizations. We elected at this point to focus on "speed-dating" activities and short presentations from outside presenters coupled with significant break-out group time to engage questions related to developing geospatial research on campus and with an eye toward Phase II proposals. We also prepared a brochure draft which was circulated to planning group for comment. The comments were collected, a revised brochure prepared, printed and distributed to individuals and groups from the existing geospatial list via email and in print format at the GIS Day event in November. An informative website and SurveyMonkey based registration website were created. Information provided for registration was collated to prepare a "Participants" page on the symposium website (see Appendix xx).

On 13 January we received an email message informing us of the change in the phase II submission guidelines, opening call to all staff and researchers at the University. This led to a change in

our thinking about the symposium organization and we choose to move individual presentations of research interests and activities from the break-out groups to the plenary sessions. This was auspicious, as the number of active participants in the symposium was ideal for whole group information exchanges. Further, it better coincides with the most well-known way of presenting research: the slide presentation and was therefore well suited for consolidating the breadth of research activities occurring at the University. Some outside participants also prepared presentations, although along with a number of University staff and researchers, they elected to offer only brief informal statements.

Participants and Activities

We received 44 registrations on the registration web site. The majority indicated they would take part Friday, fewer indicated they could participate Saturday and even fewer on Thursday or in the Friday night social event. Three participants were from the Duluth campus and four from off-campus institutions. We also were fortunate to have established early on the participation of leading scholars in the field of GIS, Professor Michael Goodchild from UC Santa Barbara and Professor May Yuan from the University of Oklahoma. Both are internationally renowned scholars and offered research presentations as well a engaged commentary in break-out groups and a closing panel discussion.

Thursday night commenced the symposium with an ice-breaker dinner, which was a tremendous boon for those who could participate. The relaxed informal discussions were perfect for setting a collaborative, open rapport. Friday morning began with an opening session that provided an overview of the symposium. Dr. Lawrenz also offered a summary of the MN Futures program and answered questions. After this, we began with participant presentations, following an order of presentations that had been developed in consultation with participants. An ample break in the morning, hour-long lunch break, and large break in the afternoon assured participants had sufficient time for informal conversations. The break-out group discussions in the afternoon took up challenges, knowledge-gaps, and transformational opportunities in developing geospatial research at the University. Groups were organized loosely along the three themes of the symposium (see brochure in the appendix). The Friday night social event was not very well attended (the problem of holding an event on campus), but those who came engaged in lively discussion about research and nascent project ideas.

Saturday discussions picked up on these issues and focused on thinking about possibilities to develop research on campus. This led the way to a very lively panel discussion that discussed various constellations of groups, broad research opportunities, the challenges of collaborative research in a very large research university, and interdisciplinary ideas. Participants saw a number of areas for research collaborations, but felt that something larger than projects was needed to sustain geospatial research on campus. Thoughts about this ranged. IGERTs and similar were seen as one approach, but the toll on faculty was seen to be a limiting factor. The limited availability to develop research and archival resources on campus was taken by most to be an even more significant restriction. With world-class programs, personnel, and a history of cutting-edge contributions (LIMIC and MapServer stand out but are not the only ones), possibilities are rich, but capacities for developing transformative and synergistic infrastructure and research are limited by the press of existing commitments and the lack of support for release time for staff and faculty are significant issues. Still the idea of a center was attractive for most participants, although administrative support questions were unfortunately foremost on most minds when ideas for different organizational models were advanced. Agreeing that currently graduate students are the best “glue” for interdisciplinary research, panelists and participants felt that developing this component would be the best strategy in the short run and help open perspectives on the long-term opportunities. Professor Goodchild discussed his experience in creating a campus-wide GIS initiative and center at UCSB, underscoring the extreme diversity of the University

with both top-notch NSF classics, NIH activities, and a number of groups tied into state and other governmental activities, but the latter with limited reach in the research domain. Developing “true” research potential is connected to domain interests. The “spatial” concept is the broadest way to bring people, disciplines, and institutions together. NSF’s emphasis on diversity, impact and society means unique potential to go after NSF funding for a large center (Science of Learning Centers program). Administrative support of infrastructure development would leverage funds for multiple research programs.

Informal Assessment

The symposium was attended by a small but very active and vocal group. Several people were unable to attend who had been involved in preparations or very interested in participation due to health reasons. Overall, participants we spoke to underscored the value for networking that took place because of the symposium. The closing panel discussion was also seen as a tremendous success. One participant referred to as the best panel ever.

Openness: Advertisement on the University Calendar; use of the geospatial mailing list, flyers distributed on campus, contact of Minnesota GIS/LIS group members. Participants included faculty from other colleges (MCAD), state agencies, regional agencies, industry, and private citizens. Students and research staff took part regularly

We don’t know if all participants share these views, but our assessment is that the symposium was a success. In a chain of events that bring the University geospatial community together, the symposium activities and discussions brought the potential to the fore. Sustaining it is the challenge for the future. Chances for success with follow-up proposals and collaborations have improved thanks to the symposium.

New Collaboration: The workshop activities were designed to foster new collaborations. These topics of discussion provide a sense of issues for possible new collaborations. These are broad and not-committal, however we can say that we know of four to five groups forming and meeting to discuss proposals.

- Biking & Transportation (Terveen, Hourdos, Harvey)
- Sonification (Edsall, Craig)
- Next generation spatio-temporal visualization (Edsall, Interrante, Keefe)
- Spatio-temporal networks (Levinson, Shekhar)
- Land use and land change (Manson)
- Geocollaboratory (Jon Foley, Loren Terveen)
- Spatial analytics (Banerjee, Oakes, Shekhar, Pusey)
- Organizational models, graduate programs, IGERT, centers (Bryson, Johnson, Craig, Harvey)
- Recruiting qualified students for existing research laboratories

We should point out that a number of researchers may be drawn to the research funding made available under the just signed American Recovery and Reinvestment Act of 2009.

Appendices

List of registered participants

Agenda

Website home page

Symposium Brochure

Workshop proposal

List of registered participants

Amy Hribar	hriba007@umn.edu	Magrath Library
Amy West	westx045@umn.edu	Social Sciences and Professional Programs
Anne Pusey	pusey001	Ecology, Evolution and Behavior
Bob Frazier	frzbob@gmail.com	none
David Mulla	mulla003@umn.edu	Soil, Water & Climate
Efi Foufoula-Georgiou	efi@umn.edu	Civil Engineering
Francis Harvey	fharvey@umn.edu	Geography
J. Kevin Byrne	kbyrne@mcad.edu	Science Baccalaureate Program in Visualization, MCAD
Jake Galzki	galzk001@umn.edu	Dept. of Soil, Water, & Climate
Joe Knight	jknight@umn.edu	Forest Resources
John Bryson	jmbryson@umn.edu	Humphrey Institute
John Hourdos	hourdos@umn.edu	Civil Engineering - Minnesota Traffic Observatory
Judy Garrard	ygarrard@umn.edu	School of Public Health
Kristi Jensen	kjensen@umn.edu	John R. Borchert Map Library
Laura Musacchio	musac003@umn.edu	Landscape Architecture
Loren Terveen	terveen@cs.umn.edu	Computer Science & Engineering
Mark Kotz	mark.kotz@metc.state.mn	Metropolitan Council
May Yuan	myuan@ou.edu	Atmospheric and Geographic Sciences, University of Oklahoma
Michael Goodchild	good@geog.ucsb.edu	Geography
Mike Dolbow	mike.dolbow@state.mn.us	MN Department of Agriculture
Mohamed F. Mokbel	mokbel@cs.umn.edu	Computer Science and Engineering
Paul Morin	lpaul@umn.edu	Department of Geology and Geophysics
Randall Johnson	randy.johnson@metc.state	MetroGIS
Rob Edsall	edsal001@umn.edu	Geography
Scott Zeimetz	sfzeimetz@gmail.com	Independent GIS Researcher
Shashi Shekhar	shekhar@cs.umn.edu	Computer Science & Engineering
Stacey Stark	slstark@d.umn.edu	Geographic Information Sciences Laboratory, CLA
Steve Graham	steveg@d.umn.edu	GISL
Steven Manson	manson@umn.edu	Geog
Sudipto Banerjee	sudiptob@biostat.umn.edu	Biostatistics, School of Public Health
Tim Loesch	tim.loesch@dnr.state.mn.u	MGIS
Tom Burk	tburk@umn.edu	Forest Resources
Victoria Interrante	interran@cs.umn.edu	Computer Science and Engineering
Vipin Kumar	kumar@cs.umn.edu	Computer Science and Engineering
Will Craig	wcraig@umn.edu	CURA - Center for Urban & Regional Affairs

Agenda

Symposium Schedule

29-31 January, 2009, Digital Technology Center, 4th Floor of Walter Library

Thursday, 1/29

06:00 - 09:00 Ice-breaker dinner

Friday, 1/30

08:30 - 09:00 Continental Breakfast and Registration (Walter 402)

09:00 - 09:10 Welcomes

09:10 - 09:30 Frances Lawrenz (OVPR)

09:30 - 10:30 Keynote Presentation (Prof. M. Goodchild)

10:30 - 10:45 Break

10:45 - 12:00 Individual Introductions (10) - see tentative organization

12:00 - 01:00 Lunch in groups (box lunch)

01:00 - 02:30 Individual Introductions (5)

02:30 - 04:15 Break-out group discussions (Walter 405 & 40x & 101)

Topic: Challenges, knowledge gaps, transformative opportunities

03:00 - 03:30 Break (as needed)

04:15 - 04:45 Wrap-up and plans for second symposium day (Walter 101)

04:45 Transit to the Guthrie Theatre for informal discussion, dinner, and play

05:00 - 09:30 Dinner and a play: *Two Gentlemen of Verona*

Saturday, 1/31

09:00 - 09:30 Continental Breakfast and Day's activities overview

09:30 - 10:30 Break-out group reports and individual introductions (5)

10:30 - 10:45 Break

10:45 - 11:30 Plenary Presentation (Prof. M. Yuan)

11:30 - 12:30 Break-out group discussions

Topic: Funding perspectives

12:30 - 01:30 Lunch mingler

01:30 - 02:00 Break-out group reports

02:00 - 03:00 Panel discussion

03:00 - 03:30 Closing and thanks

Website Home Page

geospatial.umn.edu/futures

Minnesota Geospatial Futures Symposium

[Home](#) [REGISTRATION](#) [THEMES](#) [PARTICIPANTS](#) [BACKGROUND CONTACT](#)



*No matter how big the telescope is,
on one side it is the size of human
eye. - Ludwig Wittgenstein*

[Registration](#) | [Themes](#) | [Participants](#) | [Background](#) | [Contact](#)

JOIN THE DISCUSSIONS

On January 30th and 31st, 2009, the University of Minnesota Geospatial Futures Symposium will take place at Walter Library on the Twin Cities' East Bank campus. An Ice-breaker event starts things out on January 29th.

U of M participants together with distinguished guests will meet to discuss geospatial research, challenges, knowledge gaps as we exchange perspectives on how to transform geospatial sciences at the University for the coming generation of opportunities.

Participants will mainly be faculty and staff researchers at the University--graduate students and others are encouraged to participate.

UPDATE

Individual presentations from the symposium, the symposium introduction, and notes from the panel discussion are now **available**.

Broschure

Available at geospatial.umn.edu/futures

UNIVERSITY OF MINNESOTA

EXPLORING

SPATIAL-TEMPORAL
FUTURES OF

GEO-INFORMATICS



Der Spiegel, 2008

A symposium to identify challenges, knowledge-gaps, and transformational opportunities

1/29 - 1/31/2009

Digital Technology Center
(4th floor of Walter Library)

geospatial.umn.edu/futures

Workshop Proposal

The submitted proposal is available [online](#).