

Digital Letters

Winter 2006

Issue Number Ten

Letter from the Editor

Welcome to the first issue of *Digital Letters* for 2006. In this issue we explore services, software, and data in the GIS arena. In my interview with Dawn Martin, GIS Coordinator, we explore how UCSD is utilizing GIS in research.

In addition, Marlo Young writes an article about social software technologies, many of which the UCSD Libraries is already using and a few which we should consider how to integrate into our services in the near future considering their ubiquitous nature.

Early 2006 is also shaping up to be an exciting time for *Digital Dialogs*. Look for details in this issue and your email boxes soon. Hope you enjoy!

~ Trish Rose, Metadata Librarian,
Metadata Services Department

GIS Services and Support at UCSD

This interview was conducted November 28, 2005

TR: So Dawn, can you tell me what the acronym GIS stands for and what it encompasses?

DM: GIS is the acronym for Geographic Information Systems. It is a combination of hardware, software, data, and processes that allow a user to capture, store, query, analyze and display their spatial and non-spatial data. It also allows one to create outputs of that data, such as maps, graphs and charts.

TR: Who is using GIS on campus (departments, students/staff/faculty, etc)?

DM: There are a wide variety of GIS users on campus. Students and faculty from the SDSC, various research divisions at SIO, Urban Studies & Planning, Environmental Health & Safety, Anthropology, Government & Community Relations, Biology, UCSD Healthcare, CalIT2, and Visual Arts have all used the lab or contacted me for technical assistance.

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Social Software Technologies: Extending the Visibility and Accessibility of Information Services

Academic institutions, including libraries, are increasingly utilizing low or no-cost technologies that fall into the class of "social software" to extend services and create opportunities for communication and learning in the digital domain. Accordingly, this article provides an overview of various social software applications and highlights various library usage of these popular communication tools.

⚙️ Blogs

Blogs are dynamic, easy-to-use communication tools which encourage knowledge sharing. A blog can be utilized to promote information services, research tools and tips, and subject/industry-specific content. Blog entries permit readers to share and post comments and are displayed in reverse chronological order. Entries can contain text, links to web pages, images, video, and audio files. A blog can be incorporated into an information center's website, individual desktop preferences, and the company intranet. There are a variety of open source and fee-based blogging applications. Presently, the Biomedical <http://gort.ucsd.edu/mtdocs/bml/>, Science & Engineering, and Social Sciences & Humanities Libraries are utilizing blogs as is the Digital Library Program with its *diglet* blog <http://gort.ucsd.edu/mtdocs/diglet/> and the Instruction & Outreach Committee has an *i-Librarian* blog. Academic Computing Services is in the process of securing a free blogging service that will be available to all UCSD students, faculty, and staff.

⚙️ Discussion Forums

Similar to blogs, online discussion forums are modeled after the traditional bulletin board concept allowing users to electronically post a "topic" or "discussion thread" for others to read and comment upon. Discussion forums can contain numerous categories and topical posts. Hyperlinks, images, video, and audio files can be embedded within the posts. Anytime a topic, or a reply to a topic, is posted, the discussion item appears at the top of the forum with the date, time, and poster. Users can register their name or remain anonymous within discussion fo-

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TR: *Are GIS courses being taught?*

DM: There are several GIS courses that are offered at UCSD through the Urban Studies & Planning, History, Earth Sciences, and Anthropology departments. Currently, I am also teaching a non-credit GIS course through UCSD Extension for the Marine Biodiversity & Conservation program. For those people who don't want to take a credit course through UCSD, or cannot wait until they are offered, there are also a variety of web-based courses that are freely available, which are very popular.

TR: *What services does the library provide?*

DM: The library gauges campus GIS data needs and provides for data acquisition. Additionally, I have worked with other departments when they are buying data for their own needs to have it stored in the library, so that others on campus may use it. This is particularly attractive, since the library does not need to spend any of its own money for buying the data. In these cases, I work with the department and the vendor for the data to ensure licensing issues are worked out before the data are purchased. The library also helps patrons with cartographic creation and spatial analysis and statistics. Finally, we also offer software support, which is valuable to patrons, because the GIS software can be complex.

TR: *What software/equipment does the library have?*

DM: We have five workstations that are dedicated to various GIS and spatially-oriented software packages, including ESRI ArcGIS and ArcView, Microsoft MapPoint and Google Earth. We also have a large format plotter, which is for printing maps that are larger than the standard 8 1/2 x 11 paper size. Finally, we also have a flatbed scanner, which can be used for scanning hardcopy maps into a digital format, so that they can be used in GIS.

TR: *How does GIS fit within the library and the larger campus?*

DM: The library has a lot of spatial data, and having a person that is knowledgeable in GIS is necessary to provide access to this part of our collection. Without a Geography Department at UCSD, the library has the only centralized GIS presence on campus. Without this presence, many students, staff, and faculty would be at a loss as to who to go

to for help regarding GIS.

TR: *What are the challenges with providing GIS in the library?*

DM: People don't know what GIS is, and consequently, they don't know what I do.

I've had to get used to the notion of "historical" data. Coming from the private sector, we always wanted the most up-to-date data possible and would get rid of "old" data. In the library, of course, people come in all the time, asking for historical data. Not only do we need to store it, I need to be able to find it.



Image produced by Google Earth software

Another challenge is the lack of a cohesive GIS community on campus. There are many users, but since there is no Geography Department at UCSD, there wasn't a natural venue for getting those users together to discuss issues or problems that they may be having. To remedy this, I

have put together a couple of GIS User Group Meetings. These meetings have helped users facilitate data sharing and technical solutions. I don't think that people tend to think of the library as a center for GIS, and so these meetings have also helped campus users be more aware of our resources and services.

TR: *How do you do outreach?*

DM: In addition to the GIS User Group meetings, I have taught several GIS courses on campus as an Authorized Instructor for ESRI, the major GIS software company. These are non-credit courses, but students receive a certificate of completion from ESRI.

In addition, for Geography Awareness Week last week, there was a Lunch & Learn Film Series in which we showed geography-related films. Also, on GIS Day, there was a Trivia Contest, in which people were encouraged to come to the GIS Lab and answer geography-related trivia questions that were tied to balloons scattered around the campus. Throughout the day, we held an Open House for the lab and told people about GIS and the resources at the library. All told, we had over 100 participants in Geography Awareness Week.

TR: *What changes do you see coming in the GIS field that will affect the library?*

GIS Services and Support at UCSD *(continued from page 2)*

DM: I think that more data will be freely available on the Internet. Archival copies of these datasets should be stored in digital libraries, so that these data are not lost when updated versions become available.

We're also seeing more people want an easier way of visualizing their data. They've heard of the merits of GIS and have decided to look at their data spatially. Traditionally, it has been a very laborious undertaking to learn GIS software. Companies are now realizing that all users don't necessarily want the full functionality of a GIS, and this has resulted in "watered down" GIS software packages that perhaps only allow one to view and query data.

In addition, I think GIS will continue to grow in the areas of everyday use, with front end uses of GIS being available and used by many more people. We've already seen this with the advent of navigational systems such as OnStar, which use a GIS database to perform its routing systems and queries. With the entry of Google Earth onto the GIS scene, more people are using imagery to view their data. In the library, I think that we'll see people wanting to incorporate imagery into the visualization process.

TR: Dawn, thank you so much for your time and informing us about these important resources and services within the library.

Social Software Technologies *(continued from page 1)*

runs and, often, Content Management Systems contain a discussion forum functionality. There are also stand alone open source and fee-based discussion forum applications. In collaboration with Sixth College, Marlo Young created an experimental discussion forum to promote the UCSD Libraries, its services, events, resources, research strategies, as well as social and ethical issues related to information project developments. The forum, known as "Study Break", was integrated into the old Sixth College website/digital community as a mechanism for virtual outreach. Averaging 1,000 reads a month, it proved to be a very effective communication and learning modality among undergrads. To learn more about the pilot project, see clics.ucsd.edu/studybreak/SBeval.pdf



Screen shot from the Study Break discussion forum

Instant Messaging

Instant Messaging (IM) software is a very simple way to extend information services in a web-based environment. Incorporating IM into a suite of services provides users with virtual access to information expertise and the opportunity to "chat" in real-time with an information expert. 85% of people ages 15-25 have at least one IM account. There are IM applications compatible across various IM platforms, such as Skytype and ICQ. And, there are software tools to

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manage multiple IM accounts set up with different providers (i.e. Yahoo, AOL, MSN Messenger, etc.), like Trillian and Gaim. Presently, a few librarians within the Biomedical and the Science & Engineering Libraries are experimenting with IM to assist users. Most IM platforms now come with standard voice, video, and co-browsing.

☼ [RSS Feeds & Readers](#)

RSS technology, short for Really Simple Syndication or Rich Site Summary, enables content to be pushed directly to users who elect to subscribe to "RSS feeds" from content providers that have an RSS option on their website or blog. In addition to facilitating the "syndication of content" via the Web to users (CNN, Amazon, and the NY Times are a few examples) the technology, conversely, allows one to track content updates on a website, or from various databases, for current awareness/competitive intelligence alerting by establishing a personal RSS reader account. BML, S&E, and SSDL have incorporated RSS technology into their websites for patrons wishing to be electronically apprised of library-specific news and events. Checkout NewsGator, a free RSS tool, to create your own reader and/or to learn how to embed an RSS feed onto a website. See newsgator.com/home.aspx

☼ [Short Message Service & Text Messaging](#)

Short Message Service (SMS), text-based communication via a digital mobile phone, is more commonly referred to among its users as "text messaging". SMS presents another modality for information professionals to connect and communicate with users. Altrama Systems & Services has a new "Reference by SMS" service that's specifically designed to allow libraries to expand their reference services to the mobile phone environment. Altrama's service submits text messages sent to the information center into a web-based email account. Responses sent back to the inquiring patron are sent via an email interface. As part of its service package, the subscriber is issued its own unique cell phone/text messaging phone number. To learn more about librarians experimenting with this service, you can view a 12 page summary of a university library pilot project at: conferences.alia.org.au/online2005/papers/a12.pdf and a Power Point at: www.quloc.org.au/working_parties/networking/reports/new_comm_tech-ppt/nct-curtin_sms.pdf

Social software technologies also serve to enhance knowledge sharing, library awareness and user perceptions, and communication. In thinking about adopting any new technology, it's important to consider objectives and desired outcomes, organizational priorities and user preferences, staffing and financial issues, and the role that IT departments can play in the adoption, integration, and sustainability of a new service.

~Marlo Young, Undergraduate Services Librarian, SSDL

UPCOMING DIGITAL DIALOGS

Tuesday, March 14, 2006 **2:00-4:00pm** **Geisel Library, Seuss Room** *(light refreshments will be provided)*

Keeping Up with the Changing Landscape of Library Education

Speaker: Sherri Velucci, Rutgers University *(live, in-person)*

Dr. Sherry Vellucci is a member of the faculty in the Department of Library & Information Science, School of Communication, Information and Library Studies, Rutgers University (New Jersey), where she teaches courses in Organizing Information, Cataloguing, and Metadata.

Thursday, March 23, 2006 **12:00-1:00pm** **Room 276** *(brown bag, drinks provided)*

Highlights from O'Reilly ETech Conference

Speakers: several UCSD attendees to the O'Reilly ETech Conference *(tbd)*

This dialog will feature debriefs from several staff from the UCSD Libraries who will be attending this year's O'Reilly Emerging Technology Conference to be held in San Diego March 6-9th. Last year's debrief turned out to be very stimulating and was a chance to hear about concepts such as "The Long Tail" by Chris Andersen. For more information on the conference see <http://conferences.oreillynet.com/etech/>