

Cutting-Edge Mapping Technology at UC Berkeley

Letter from the Director

Welcome to the Fall 2008 Semester. Summer 2008 has been a busy one for the GIIF. First and foremost, we have changed our name, changed our look, and the Facility is now called the Geospatial Innovation Facility (GIF). That way we keep our snappy acronym, but make it easier for you to remember. We also want the name to embrace how we feel about the facility and geospatial technologies: we want to be the place you come for ideas, support and a community devoted

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to cutting-edge geospatial technology for the environment. We spent the summer coming up with a new workshop curriculum that will meet your needs for introductory and advanced topics. Many of our 2008-2009 workshops are new. For exam-

ple, we're introducing a workshop on Species Distribution Modeling and a workshop on linking a camera with a GPS for Photo-point GPS Monitoring. Stay tuned, and make sure you sign up to receive GIF email.

The new semester brings a new cohort of students into the College, and to welcome them, we are hosting an Open House on September 5th. Please stop by. The semester also brings new staff! We devote much of this newsletter to our new Manager Kevin Koy and to Jeremy Freund. Read about their skills and interests, and then come visit.

The geospatial fields continue to grow and excite us; the GIF is here as a focal point for all your geospatial interests. Drop in when you get a chance. 111 Mulford Hall.

- Maggi Kelly

GEOSPATIAL NEWS

GIF Rebranded!

ew name, new logo, new web site. . . Among the many exciting changes for the Fall 2008 academic year is a complete rebranding of the Geospatial Innovation Facility (GIF) formerly named Geospatial Imaging & Informatics Facility (GIIF). The new and improved version of our website http://gif.berkeley.edu offers simplified navigation and a useful search tool, making it easier for users to locate geospatial tools and techniques, workshops and training opportunities, and facility locations and events.

> Along with the GIF's new visual identity, we are offering a variety of fresh additions to our already well known support and services. New workshops this year will include advanced geospatial topics

> > in Land Cover Change Analysis, Species Distribution Modeling, and Photo-point GPS Monitoring.

Keep an eye on our website for the latest schedules.

GIF staff, Kevin and Jeremy, will also continue to provide support for all of your geospatial queries with office hours available throughout the week. This is a great opportunity to get advice on developing a project or to get help with software. Our staff share a wide range of experience and are happy to assist you. For more complex geospatial research, we are always interested in collaboration. Contact us to learn how the GIF can offer your research projects and grant opportunities an innovative geospatial component.

We hope that you enjoy our new look and services. It is our goal to provide a unique geospatial resource for all of your mapping needs!

Highlight on GIF Staff

Publication of the

Geospatial Innovation Facility

September 2008 (Vol. 3, Issue 1) Also online at http://gif.berkeley.edu

College of Natural Resources, UC Berkeley



Kevin Koy,
Manager of the GIF, has ten years of experience using and teaching geospatial technology. At the facility, Kevin develops geospatial workshops,

promotes new research opportunities, and provides organizational support.

Prior to his arrival this summer, Kevin was the Biodiversity Informatics Specialist for the American Museum of Natural History's Center for Biodiversity and Conservation. His experience at AMNH included mapping land cover change and developing capacity building initiatives in Vietnam and Lao PDR, as well as aiding in the analysis of species distributions in Madagascar. Kevin's experience in geospatial technology began as a Remote Sensing / GIS Analyst for the Smithsonian Institution where he studied Eld's deer habitat in Myanmar's dry dipterocarp forests.

Jeremy Freund, Geospatial / IT Specialist at the Geospatial Innovation Facility, provides geospatial support for research projects, teaches geospatial workshops and maintains the GIF's hardware and software.



Jeremy comes to us from a Master's program in the Geography Department at UC Santa Barbara where he worked on a famine early warning system using multi-spectral remote sensing techniques. He focused on crop production estimation to help famine abatement efforts in Eastern and Southern Africa. Jeremy spent 5 months living in Botswana developing a "crop estimation tool" for the Southern African Development Community (SADC) which utilized MODIS satellite data and GIS techniques. He also has a background in Web design and information technology management.

Visualizing UC Berkeley's Value with Maps: Locally, Regionally, and State-wide

One of the roles of the Office of Government and Community Relations (GCR) is to demonstrate the value of UC Berkeley as the nation's leading public university to elected officials, government agencies, the local community, and the general public. To better depict this, the GIF was

commissioned to map location and distribution of UC Berkeley students, alumni, employees, public service programs, and vendors for such areas as local cities and counties, the Bay Area

region, Congressional and state legislative districts, and the state. These maps add space and place to Cal's contributions locally, regionally, and state-wide.

The project has been a successful collaboration of three campus units. GIF and GCR staff established project specifications, target audiences, and geospatial goals. IS&T's Data Services Group managed the data acquisition and formatting, while GIF staff "geocoded" the data

- a process that converts street addresses to mapping coordinates within a Geodatabase - and mapped them using Arc-GIS. Geospatial



Berkeley

visualization will be an important contribution to Government and Community Relations' communications materials. The GIF is proud to be involved in such a valuable project, and we look forward to working with more UC departments as they develop their geospatial ambitions!

Recent & Upcoming Events

ELP Student Training

The GIF was happy to work with the Environmental Leadership Pathways (ELP) again this summer. The GIF began working with the ELP program in the Spring when we taught a module in community health mapping. The ELP http://nature. berkeley.edu/cnrelp recruits underserved and first-in-the-family community

college students and prepares

them to transfer successfully to and thrive at highly-selective universities in science disciplines.

The GIF provided training in GPS to this summer's students, who were eager to learn how geospatial mapping technology could be used to benefit their research interests. During the GPS training exercises, students were encouraged to produce "GPS art" by capturing

a line while walking with the receiver. As

you can see in the map above, Jennifer Lopez and Rafael Montanez managed to spell out their program's acronym "ELP"!

We enjoyed working with ELP's bright young minds and wish them luck in their future research endeavors!

Undergraduate Research Program Scholarship

Thanks to a generous contribution by GIF Advisory Board member Larry Pettinger, the Undergraduate Research Program provides financial assistance to UC Berkeley undergraduate students who would like to take a workshop, rent a GPS unit, or print a poster. We can provide assistance to 20-30 students who would like to receive financial assistance for these services. To apply for this great opportunity, visit: http://gif.berkeley.edu/ support/undergrads.html.

Workshops & Seminars

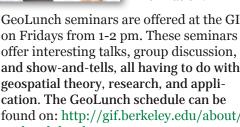
The Fall 2008 workshop agenda is now available at: http://gif.berkelev.edu. Be sure to check out all of the different geospatial courses being offered in:

- Intro to GIS
- Intro to GPS
- Intro to Remote Sensing
- Land cover change analysis
- Object-based image analysis
- Creating a WebGIS with Google Maps
- Visualizing your data with 3D globes
- Intro to Species Distribution Modeling
- Photo-point GPS monitoring

GIF workshops offer hands-on applications oriented training in a variety of geospatial topics. They are open to all UC students, faculty, and staff at a discounted

> rate, and to non-UC affiliates at a set rate. In addition to our workshops, the GIF offers access to ESRI online training materials; contact Jeremy or Kevin for more information.





Coming Soon

Open house

Come join us in the GIF on Friday, September 5 for our annual open house. We will be offering information on how you can use geospatial technologies to enhance your own research!

GIS Day 2008

The GIF will be hosting GIS Day events on Wedneday, November 19! Keep an eye on http://gif.berkeley.edu for upcoming details.