

Welcome to 2006 GIS Day

Wednesday, November 15, 2006 - Wurster Hall, UC Berkeley

University/Higher-Education Sessions

3:00-3:30 Speaker Session 1
3:30-4:00 Speaker Session 2
4:00-4:30 - Break
4:30-5:00 Speaker Session 3

Professional Sessions:

*** Keynote address @ 5:30-6:30pm in 112 Wurster Hall
6:30-7:00 Speaker Session 4
7:00-7:30 - Break
7:30-8:00 Speaker Session 5
8:00-8:30 Speaker Session 6

Academic Speakers include:

Casey Cleve & Eric Waller, Staff Research Associate, Center for Fire Research and Outreach, UC Berkeley

Fire Hazard Mapping

Adina Merenlender, Adjunct Associate Professor, Division of Ecosystem Sciences, UC Berkeley

Forecasting the relative impacts of existing and future land use on fine sediment in anadromous fish habitat

Spatially explicit parcel-level data is used to examine the influence of land-use types including rural residential, urban, and vineyard development on salmon spawning substrate quality in tributaries of the Russian River Basin, California and develop a land-use change model to forecast the expected changes in land-use and the probable loss of salmon habitat quality.

Alan Forghani, Visiting Fulbright Scholar, Remote Sensing and GIS Specialist, GISC, UC Berkeley

Spatial information technologies in modeling catastrophic natural disasters

Many countries around the globe are susceptible to natural disasters (wild fire, flood, severe wind, coastal erosion and tsunamis). Government agencies at local, state, federal and international levels are generally

aware of the impacts of the disasters. Strategies to better minimize damage from these hazards are critical to prosperity and safety of the nations. National and international risk assessment methodologies play an essential role in mitigation of the disasters impacts. In this talk, examples of utility of spatial information technologies for mapping and modeling of a tsunami scenario in the disaster suite affecting coastline landscapes, and capability of satellite remote sensing to detect bushfires will be demonstrated. His current research at the UC Berkeley's Geographic Information Science Center (GISC) aims to build an international collaborative bush fire spread risk mapping initiative. The GISC tries to develop a prototype wild land urban interface fire fuel mapping program based on high-resolution multi-sensor optical and radar imagery, integrated GPS and PDA technologies, customized GIS software, and wireless Internet access. Multiple agencies participation in its development is required.

Allison Lenkeit Meezan, Geography & Geographic Information Systems, Foothill College GIS and Geography Education and Duncan V. Crowl, Digital Mapping Inc.(DMI)

High resolution remote sensing data – capture to product generation for customers

Abstract coming soon!

**John Landis, Professor, Department of City and Regional Planning, UC Berkeley
Urban planning and GIS**

Urban Planning and GIS

Gordon Ye, PG&E

This presentation will focus on four main themes including: (1) GIS applications for utility asset mapping: an integrated asset information system linking SAP and operations management systems with GIS, (2) Industry-specific GIS data model development: how ESRI standard data models can be customized to fit specific needs of the company; how operations management system software vendors are able to use standard GIS data models to streamline development of custom tools, (3) Risk management applications of GIS: earthquake risk evaluation, pipeline integrity management, and (4) Open GIS standards for interoperability.

Professional Speakers include:

EMERGENCY RESPONSE GIS TRACT

Rachel Sleeter, USGS

Mapping Techniques for Estimating Exposed Populations

Emergency response is about safety of the people more than the protection of property. It is not possible to appropriately measure potential impact of tsunamis on an area without an understanding of daytime population vs. nighttime population levels. Discussed here is the spatial correlation of parcel map boundary data and associated use codes, floor areas and other characteristics with demographic data to fine tune these temporal measurements.

Multiple datasets (parcel-level land-use, business locations, socio-economic census attributes, etc.) are used to refine U.S. Census data into more meaningful units relative to population density. A dasymetric mapping technique outputs a map of daytime and nighttime population density at a 10m resolution for local community hazard preparedness and risk-response strategies.

Brian Quinn, City of Berkeley, BAR-GC Regional Map Server Operations

BAR-GC Homeland Security GeoServer Operations Description

Bay Area Regional GIS Council secure servers are hosted at City & County of San Francisco and County of Napa, and public servers at City of Berkeley and Association of Bay Area Governments. This talk will review the original and current goals of these repositories of regional imagery and vector data and the role played by map services in disaster simulation and response.

Kris Kolodziej, MapXperts

Reliable Emergency Response Systems

Kris will describe local and wide area positioning systems that achieve room-level accuracy (10m) and alternative / complimentary location technology to GPS, including TV-GPS, Wi-Fi, and UWB for indoor positioning and tracking for first responders.

ANALYSIS AND PLANNING GIS TRACT

Greg Bazhaw, Santa Clara County Environmental Assessment Reporter (EAR)

Demonstration of Automated GIS program used by Santa Clara

County planners to evaluate CEQA compliance for various projects requiring County land use approvals and permits.

Brad Montgomery, GIS Project Manager for Solano County

Transforming a Grass Roots GIS Unit into an Enterprise Level GIS Group through a Rapid Development Implementation

Historically, county and city government GIS units started out as ‘grass roots’ movements by one department to solve a small set of business needs. Success often resulted in expanding GIS tasks and resource utilization for data acquisition, creating and distributing multiple map products, and handling data creation and sharing requests. This talk will discuss removing blocking issues and describe a path to ‘Rapid Enterprise GIS Development.

Bradley S. Montgomery is employed by ACS, Inc. as a GIS Project Manager for the County of Solano. He has spent the last twenty years working in the GIS Field working for ESRI, Microsoft, Department of Defense, and King County, Washington.

Nicholas D. Hansen, GIS Analyst for DoIT GIS Services for Solano County

Employing ArcReader and Published Map Files to Meet Unique Needs of Client Missions

ArcReader, the free mapping application from ESRI, effectively leverages existing resources to meet the demands of developing timely, cost-effective, and user-friendly solutions to client mapping requests. This presentation will discuss how Solano County GIS Services is using ArcReader as one means of meeting general ‘Rapid Enterprise GIS Development’ goals while supporting the unique needs of client missions.

Nicholas D. Hansen is employed by ACS, Inc. as a GIS Analyst for the County of Solano. He has interned with The California Department of Fish and Game and The California Department of Transportation (Caltrans). He holds a degree in Geography from California State University, Sacramento and a GIS Certificate from American River College.

Learn what your colleagues are doing with GIS.

Network and connect with GIS Professionals, employers, job seekers.

As always, BAAMA's GIS Day will offer tasty refreshments, including

Ice Cream Sundaes!

The GIS Day activities are open to the public.

Sponsored by:

- [Bay Area Automated Mapping Association \(BAAMA\)](#)
- Geographic Information Sciences Center (GISC), UC Berkeley
- Geospatial Imaging & Informatic Facility (GIIF), UC Berkeley

