

FUND A  
CENTER



CHANGE  
THE WORLD

Geography matters:  
The power of place.



UNIVERSITY OF CALIFORNIA  
**SANTA CRUZ**

DIVISION OF SOCIAL SCIENCES

# CISR

Center for Integrated Spatial Research

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# OUR MISSION

The Center for Integrated Spatial Research (CISR) provides key leadership in the use of spatial technology at UC Santa Cruz. The environmental and social challenges facing our planet all have geographic components. Knowledge of where things are located, and why they are located there, is essential to effectively addressing these challenges. Spatial technology provides the integrative platform for understanding large, complex geographic problems and applying this knowledge to the development of better solutions.

If a picture is worth a thousand words, a map is worth a million.

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# OUR WORK

CISR focuses on integrating spatial technology and methods—including geographic information systems (GIS), remote sensing, and spatial modeling/statistics—with interdisciplinary teaching and research activities. To implement the center’s mission, we focus on three broad areas:

## Training

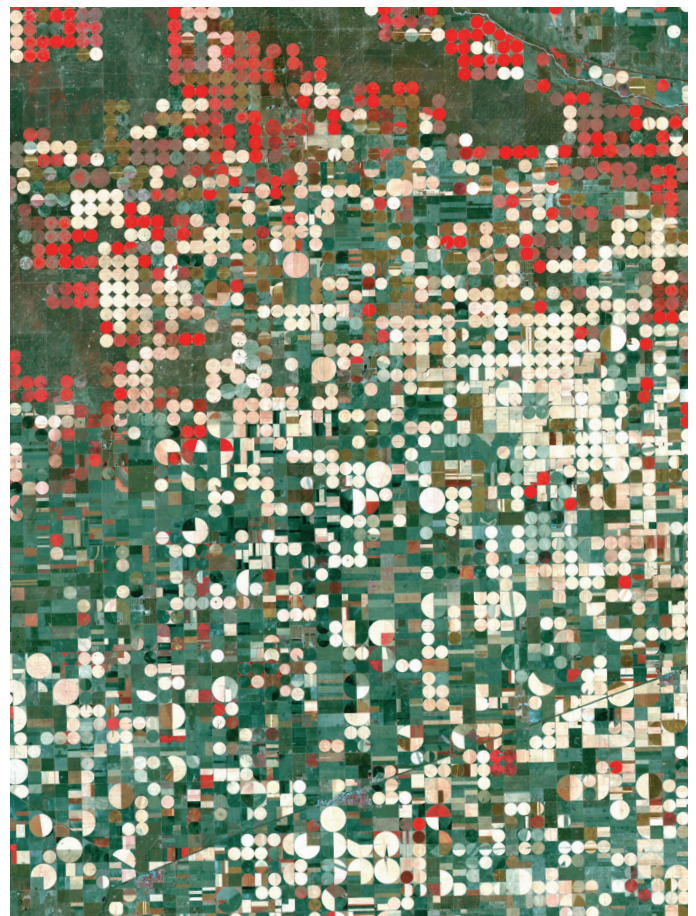
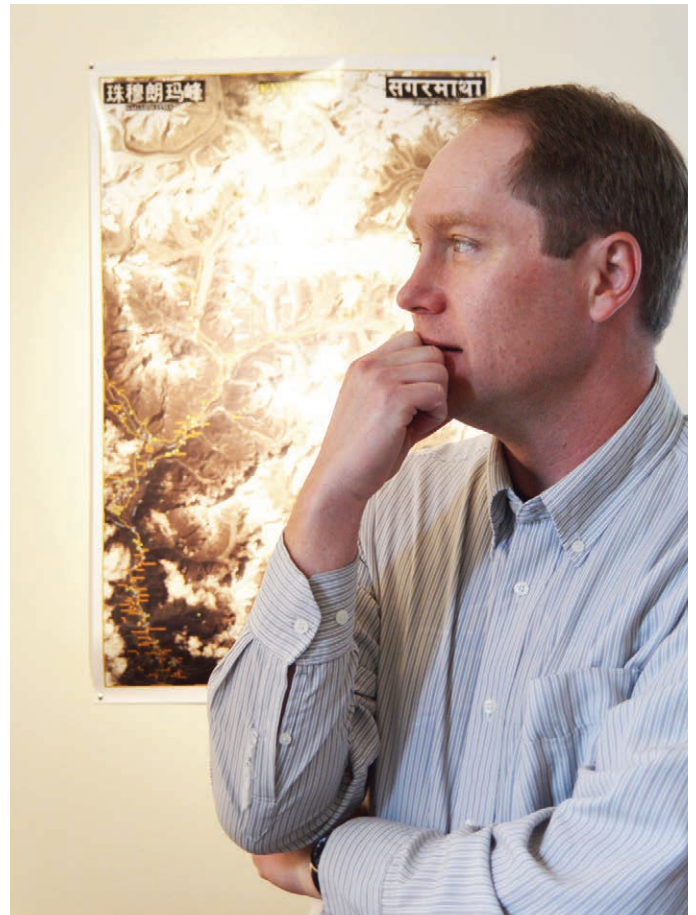
CISR provides training and guidance to UC Santa Cruz undergraduates, graduate students, and faculty. We offer the primary GIS courses on campus and have trained thousands of students in critical spatial reasoning and technology. We also train a diverse community outside the university through our Regional Training Center.

## Research

CISR promotes wide-reaching research by increasing campus and community capacity in spatial reasoning and skills. CISR staff fill key roles in the direct support of research objectives in the social sciences, humanities, and physical and biological sciences. Since it was formed, CISR has contributed significantly to projects and initiatives across the campus.

## Service and Outreach

CISR staff provide key research support and consulting services to many widely recognized organizations. In addition to UC Santa Cruz and the University of California system, CISR has long-standing relationships with organizations such as The Nature Conservancy, Conservation International, Island Conservation, and the United States Geological Survey.



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# CISR PROJECTS MAKING AN IMPACT

## Climate Resilience

Climate change is one of the biggest challenges facing humanity. The need for strategies that will buffer communities—human and natural—from adverse climate change impacts is greater than ever. In partnership with multiple organizations, CISR has developed methods to assess global and regional risks of climate change and identify nature-based solutions for reducing vulnerability to climate change threats. This work has been recognized by the United Nations Office for Disaster Risk Reduction, Environmental Systems Research Institute, and the White House Council



on Environmental Quality for its contribution to building resilience to climate change.

## Environmental Conservation

Conservation and sustainable development rely on spatial methods and technology. CISR collaborates with faculty, graduate students, and others to advance the science and practice of conserving Earth's wildlife and resources. Our work includes local wildlife conservation, regional- and national-scale planning development for preserving and enhancing ecosystems, and global protection of at-risk animals and environments.



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# ANSWERS FROM THE CENTER DIRECTOR

**Q:** How does GIS training help students?

**A:** Because these skills are relevant to a host of interdisciplinary fields of study, GIS training empowers students across the university to critically examine social and environmental problems and develop new and innovative solutions. Plus, GIS-related jobs are part of an evolving industry that has one of the most rapid job growth rates in the United States. Such high demand is due to the need for both spatial thinkers and technically competent users of spatial technology.

**Q:** Where would you like to see the center in five years?

**A:** The center is the foundation for our efforts to develop enhanced educational and professional training opportunities that are in high demand. It will also continue to serve as the nexus for integrated spatial research on campus. We envision creating new, innovative curricula, and fostering a host of invaluable experiential opportunities with research projects and agencies that provide applied exposure to real-world projects.



PHOTO ATTRIBUTES | Satellite images: Jeff Schmalz, MODIS Land Rapid Response Team, NASA GSFC  
| USGS EROS Data Center Satellite Systems Branch

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# THE DIFFERENCE IS YOU

CISR now receives an unprecedented number of requests for qualified interns and recent graduates to fill paid GIS positions in the fields of high technology, local government, environmental consulting, academic research, and more. With your help, CISR will meet these demands by:

- Expanding GIS curriculum
- Increasing experiential training and internships/job placements for students
- Bringing on more faculty, lecturers, and teaching assistants
- Endowing and naming the center
- Expanding computing infrastructure and services
- Offering scholarships for undergraduates and graduate students

We depend on private donations to help fund the vital work we do. **Thank you for your support.**



“

Geospatial technology is . . . the single most valuable skill that I gained from my undergraduate education and set the path for my professional career.

”

— Parker Welch, Class of 2011

**FUND A CENTER, CHANGE THE WORLD.**  
Contact the Social Sciences Development Office  
at 831-459-3857 or by email at [socsci@ucsc.edu](mailto:socsci@ucsc.edu).



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THE ORIGINAL  
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ON QUESTIONING  
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