

Geographic Information Science (GIS) and Technology Research at UCSB

UCSB is a leader in the development of geographic information science (GISc), which is the area of academic research behind the development, use, and application of mapping, geographic information systems (GIS), GPS (the Global Positioning System), satellite-based remote sensing, and other technologies. It is concerned with how people, hardware, software, and geospatial data interact, and how these tools can be made more useful in a host of applications, which range from general scientific investigations in the social and environmental sciences to resource management, military operations, and wayfinding. As one of the founding leaders in GISc, UCSB has numerous centers and facilities that address this exciting and rapidly developing research area, as well as the necessary high-tech equipment.

Centers and Facilities for GISc at UCSB include:

Center for Spatial Studies (spatial@UCSB)

<http://www.spatial.ucsb.edu/home.php>

With the 2008 inauguration of Spatial@ucsb, the campus now hosts one of the world's leading centers devoted to the possibilities of analyzing, understanding, and describing the world in multiple dimensions. The Center for Spatial Studies offers new capacity for growth through its strong existing programs and facilities.



Spatial@UCSB as encompasses:

- **National Center for Geographic Information Analysis:**

<http://ncgia.ucsb.edu>

The National Center for Geographic Information and Analysis is an independent research consortium led by UCSB, with additional sites at the University of Maine and the State University of New York at Buffalo. NCGIA was established with a grant from the National Science Foundation in 1988, and is dedicated to basic research and education in geographic information science and its related technologies, including geographic information systems (GIS).

- **Center for Spatially Integrated Social Science:**

<http://csiss.ncgia.ucsb.edu>

CSISS was established through a grant from the National Science Foundation in 1999. Its goal is to integrate spatial concepts into the theories and practices of the social sciences by providing infrastructure to facilitate access to existing spatial knowledge, to make it more explicit, and to generate new spatial knowledge and understanding.

Other Centers in areas related to GISc:

FourEyes Lab: <http://ilab.cs.ucsb.edu/>

Vision Research Lab (Professor Manjunath): <http://vision.ece.ucsb.edu/manjunath/>

Center for the Study of Sacred Space in Religious Studies

Institute for Computational Earth System Science (ICESS): <http://www.icess.ucsb.edu/>

Institute for Crustal Studies (ICS): <http://www.crustal.ucsb.edu/>

Environmental Information Lab (Professor Frew): <http://eil.bren.ucsb.edu/>