

Intergraph Corporation and CAST

www.intergraph.com

www.cast.uark.edu

Maintaining a cutting edge in spatial technologies requires a close relationship with the leaders of the industry. Intergraph Corporation and CAST have mutually benefited from close ties since 1994.

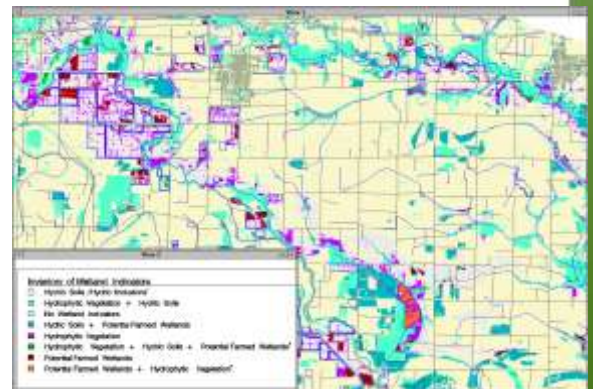
Intergraph Corporation is one of the true pioneers of geospatial technologies, with more than 30 years of experience. In 1994, Intergraph granted more than five-million dollars of hardware, software, and support to CAST, creating one of Intergraph's very first Centers of Excellence for the Mapping Sciences. This public/private partnership has lasted almost a decade as a result of the excellent fit between the mission of CAST and the corporate and personal values held by Intergraph and its management, resulting in a collaboration that has produced numerous benefits for both parties.

CAST and Intergraph Research Collaboration

Research is a key part of CAST's mission, and Intergraph products have played a major role in a wide variety of research projects over the last decade. An ImageStation and related photogrammetric software were the primary tools used for developing methodology for archiving archaeological artifacts using soft-copy photogrammetry. This unique approach allows one to view and measure objects in 3-D even when the original object is no longer available.

Intergraph GIS software, ranging from MGE through GeoMedia Professional, has been utilized in ongoing research on methods to prioritize wetlands for conservation and restoration. The results of this project provide state planners with the tools to make informed decisions.

CAST researchers are currently assessing the advanced analytical power of GeoMedia Professional, GeoMedia Grid, and GeoMedia WebMap Professional for a variety of problems. These tools all fit well in the research environment, providing a wide range of flexibility and analysis without requiring that a user possess advanced programming skills.



Intergraph GIS products are used in wetlands research.

Education

A second component of CAST's mission is education, at both the professional and academic level. On the professional side, CAST has worked with Intergraph to certify staff as trainers, and actually developed materials for one of the first short courses for GeoMedia. Additionally, Fred Limp and Debbie Harmon of CAST co-authored Inside GeoMedia, the definitive guide to that particular software. A 900-page follow-up to this original work is in progress.

In the University classroom, Professors Fred Limp and Ken Kvamme have found that GeoMedia Professional and GeoMedia Grid provide excellent teaching platforms for their respective vector and raster GIS classes. Intergraph's commitment to OpenGIS standards and enterprise-wide GIS prepare students for the future of the industry.



Outreach

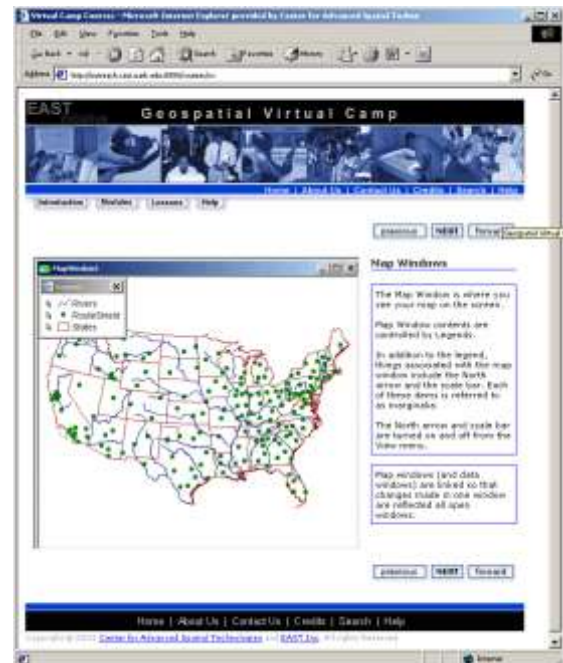
The third component of CAST's mission is outreach to communities and local government. Intergraph has been involved in many aspects of this work. Part of Intergraph's original grant to CAST involved the creation of a *Rural America 2000* lab, which enabled members of local, county, and state government to collaborate with CAST researchers on GIS-based pilot projects. The participants were able to evaluate the potential for GIS technologies in their own work, without having to invest large sums of money in unproven applications.

By far the largest impact of CAST's outreach effort is felt through the EAST Initiative (www.eastproject.org). EAST is a student-centered, project-based, community service learning initiative that originated from the high school in Greenbrier, Arkansas. Intergraph was the first major provider of technology to EAST, and CAST staff have supported students as EAST has grown from one school in Arkansas to over 200 in seven states. In 2003, CAST staff provided fifteen weeks of training in GeoMedia and related software for EAST students, followed up by seventeen weeks of on-site GIS support for students at their own schools. Additionally, CAST has developed interactive, web-based courses in GIS and GeoMedia Professional for the use of EAST students (www.cast.uark.edu/east/vc). This provides a scalable, self-paced training tool for virtually any number of students as the EAST Initiative builds momentum.

Another form of outreach that has spun off of EAST is the Community Asset and Development Information System (CADIS) (www.cast.uark.edu/local/cadis). CADIS is a summer program that builds a partnership between EAST, local business and government leaders, and major business partners to allow tech-savvy students to create solutions to important community problems. Intergraph is a key partner in this collaboration, as shown in some of the CADIS projects. Student-created sites running GeoMedia WebMap allow community members to find critical information about elected officials, schools, and utilities for their neighborhood.



EAST students and facilitators work with GeoMedia at CAST.



The Geospatial Virtual Camp provides self-paced training in GeoMedia Professional for EAST students.

Data Development and Distribution

The final component of CAST's mission is data development and distribution. As CAST looks to the future, this area is where Intergraph's vision of *enterprise GIS* seems the ideal fit. As more and more state, county, and local GIS users start demanding more from their systems, such as data sharing, quality control, and public distribution, CAST looks forward to a myriad of opportunities for continued partnership with Intergraph.

About CAST: The Center for Advanced Spatial Technologies (CAST) focuses on education, research, and service to the public, which forms the backbone of the CAST purpose and mission. CAST specializes in serving the academic community through its emphasis on university courses in Geographic Information Systems (GIS), Global Positioning Systems (GPS), and related technologies. CAST's research efforts, through multiple grants awarded each year, compliment and greatly benefit its educational and public service focus by allowing staff and students to stay on the leading edge of emerging technologies. CAST is also active in a wide range of services to the university, community, state, nation, and internationally. By building upon the expertise of the staff; the cooperation of the university community and state, regional, and local governments; the support of corporate sponsors; the assistance of federal agencies; and many others, CAST can blend its focus on education, research, and public service to multiply the benefits of all these cooperative efforts.

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