



NSF I/UCRC FOR SPATIOTEMPORAL THINKING, COMPUTING, AND APPLICATIONS



The NSF I/UCRC for Spatiotemporal Thinking, Computing and Applications (a.k.a. NSF Spatiotemporal Innovation Center) will hold its 11th semi-annual Industrial Advisory Board meeting June 19th -20th, 2019 at Harvard University. This meeting will review the center's innovative research and identify new projects to be supported through collaborations among academia, industry, and agencies. All center research results are freely shared among members to boost their products, services, and businesses. All companies or agencies (with interest in geospatial and spatiotemporal research themes) are welcome to participate. This is a prime time to become familiar with cutting-edge research results, leverage the innovative outcome for your future products and services, increase your efficiency, improve your competitiveness, and boost your business.

What is an Industry/University Cooperative Research Center (I/UCRC)?

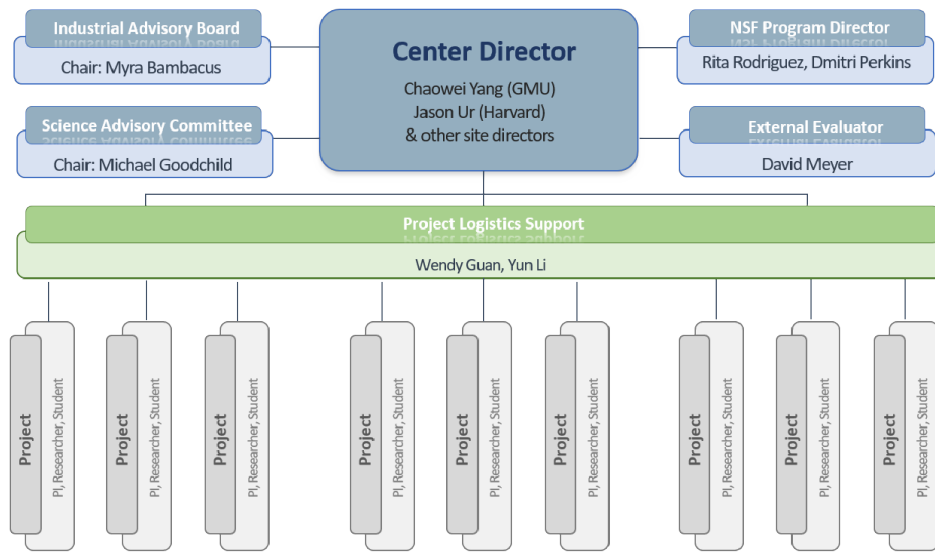
Initiated by Congress in 1973, the National Science Foundation (NSF) Industry/University Cooperative Research Center (I/UCRC) Program funds promising technologies created by university scientists and transfers the research results to companies and organizations where the results can be applied to benefit society and enhance business. An I/UCRC consists of the funded university sites and members from industry, state and federal government agencies, and non-government organizations (NGOs) by collaborating on precompetitive research. Members contribute the annual membership fee to an I/UCRC site. Through membership, the industry and the university form a close partnership that nurtures a pool of scientists and engineers to develop new capabilities for emerging domains.

What is I/UCRC for Spatiotemporal Thinking, Computing, and Applications?

Many 21st century challenges in our contemporary society, such as natural disasters, happen in both space and time, requiring that spatiotemporal principles being incorporated into the computing process. A systematic investigation of these principles can advance human knowledge by providing trailblazing methodologies to explore the next generation of computing for addressing these challenges. On September 15, 2013, the NSF I/UCRC funded three universities, the University of California at Santa Barbara (UCSB), George Mason University (GMU), and Harvard University (Harvard) to establish the I/UCRC for Spatiotemporal Thinking, Computing, and Applications (STC) to develop potential solutions to address these 21st-century challenges. The center was renewed on Mar.15, 2019 to continue the collaborative innovation. The collaborating universities collaboratively aim at building up the national and international spatiotemporal infrastructure.

The relevant domains where STC conduct research include, but are not limited to GISciences, computing sciences, location-based services, transportation, Earth sciences, environmental sciences, space sciences, public health, geological sciences, spatial data infrastructure, biological sciences, and social sciences.

STC operates under the auspices, rules and standard operating procedures of the NSF I/UCRC program. The operations are managed by universities under the guidance of an Industry Advisory Board (IAB), which comprises representatives from every member organization. Each year (research) faculty propose projects to meet the needs outlined by IAB. The IAB then vote to fund projects. The academia researchers work closely with and report to industrial members to ensure the project deliverables and close relevance.



How you would benefit as a Member of STC?

STC conducts low cost, low risk precompetitive research for its members from industry, government agencies, and NGOs. As a member of the IAB, you will assess ongoing research and set priorities for new research directions, and your organization will benefit from center innovations. Specifically, the benefits as a member include:

- Gain full access to R&D results of all sites collaborating with all members, which far exceeds what can be achieved by one organization's internal resource (such as staff and funding).
- Increase the competitiveness and the service or product capabilities of companies, organizations and agencies through deliverable-oriented collaboration with academia.
- Recruit and attract outstanding students by engaging and collaborating with them through project lifecycles.

Current IAB Members

- OmniSci.Inc
- NASA Center for Climate Simulations (NCCS)
- NASA Goddard Space Flight Center
- National Oceanic and Atmospheric Administration (NOAA)
- Siemens
- U.S. Department of State
- ZASG
- National Administration of Surveying, Mapping and Geoinformation (NASG)

Past IAB Members

- U.S. Department of Agriculture (USDA)
- The Federal Geographic Data Committee
- Harris Corporation
- Microsoft
- Northrop Grumman Corporation
- STIS
- U.S. Geological Survey (USGS)
- National Geospatial-Intelligence Agency (NGA)
- United Nations (UN)
- NASA Goddard ITCD
- East View Geospatial
- SASMG
- National Geomatics Center of China (NGCC)

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