»INNOVATION SUMMIT
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Strategies for Integrating Informatics with Humanities and Social Science Research

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Workshop Description

The University of Illinois Urbana-Champaign Strategic Plan identified both informatics and the creation of "bold new programs in the humanities, arts, and social sciences" as two of several initiatives that the campus should support in pursuance of its goal to create breakthrough knowledge and innovation. A key opportunity lies at the intersection of these two priorities. Information technology can enable humanities and social science scholars to make transformative advances in their research and teaching. Conversely, the demands involved in applying information technology to humanistic and social scientific scholarship pose new problems for informatics that can spur fundamental advances in computation.

A key challenge in building bridges between humanists and social scientists, on the one hand, and information technologists, on the other, is translation across the different perspectives they bring to the table. For humanists and social scientists to engage productively with information technologists they must reframe their problems in algorithmic terms and understand the potential of information technology for their scholarship. For information technologists to engage productively with humanists and social scientists they must understand the differences between "hard" science and engineering research and scholarship in the humanities and social sciences.

Answered Questions

1) What are the potential for and challenges facing interdisciplinary research and education?
- The digital world has opened up an abundance of data and research possibilities that "traditional" humanities and social science researchers are ill-equipped to exploit because of a combination of institutional and individual barriers. Interdisciplinary research has the potential to allow humanists and social scientists to answer these new research questions.
- There are many barriers, however:
  - Traditional reward and incentive structures do not favor collaboration.
  - There is an uneven distribution of research support and research infrastructure across the campus.
  - There is a relatively small pool of people on campus who are willing to participate in collaborations.
  - There are discontinuous governing structures across departments, colleges, centers, and institutes, resulting in it not always being obvious to faculty and staff on campus if they are even permitted to join (or lead) collaborations.
- Fundamentally, there is a substantial lack of resources—encompassing *expertise*, *funding*, *space*, *time*, *equipment*, and *incentives*—that make it difficult to engage in successful collaborations on this campus.

2) How can we engage interdisciplinary education to support interdisciplinary research?
- Graduate students should be exposed to the value of interdisciplinary research projects; this could be done through outreach by organizations listed below, through mentorships and internships on projects run by these organizations, and through RA opportunities
- Scholars from the humanities and social sciences should collaborate with technologists in co-seminars that expose how thinking can cross the disciplinary divides and how each side can stimulate the other's thinking

3) What resources and programs exist at the University of Illinois to enhance interdisciplinary experiences for undergraduates, graduates and faculty?
- Illinois Informatics Institute
- Illinois Program for Research in the Humanities
- Institute for Computing in Humanities, Arts, and Social Science
- National Center for Supercomputing Applications
- University Library

4) What systemic changes should be instituted on campus to make broad-based interdisciplinary education and research a reality?
- Fellowships and/or release time for faculty
- Reevaluation of tenure guidelines to allow for multi-author and multi-disciplinary research to be counted
- Fellowships and tuition waivers for graduate students
- A "research concierge" to assist researchers in navigating the research infrastructure, matching requests for specialized expertise with faculty, assessing research needs, making recommendations for services, and facilitating access to resources
- Information technologists should visit departments to explain how their research interests might coincide
- University should make basic services—such as scanning, OCR, website building, and access to servers and administrations—and low levels of technical support more readily available to researchers on campus
- There should be a place for interdisciplinary scholars to meet and events to stimulate their interactions

Outcomes

I-CHASS already provides several of these services and will explore enlarging our offerings in other directions

I-CHASS will work with other organizations listed on this poster to develop robust opportunities for interdisciplinary and collaborative research through ARTCA (Advanced Research and Technology Collaboratory for the Americas), HathiTrust Research Center, and other similar initiatives

A white paper detailing the results of the conference and exploring how to make these collaborations possible will be published during the summer

Future Directions

Interested organizations should create an humanities/social science informatics network to further support these initiatives

Acknowledgments

Office of the Vice Chancellor for Research

Illinois Informatics Institute

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