

# KALEV H. LEETARU

CLINE CENTER FOR DEMOCRACY  
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## SUMMARY

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Kalev H. Leetaru is Coordinator of Information Technology and Research at the University of Illinois' Cline Center for Democracy, Chief Technology Advisor to the Institute for Computing in the Humanities, Arts, and Social Science, and a Center Affiliate of the National Center for Supercomputing Applications. He has been developing web technologies for 15 years and his award-winning work on web mining, text processing, and content aggregation technologies have been at the forefront of several Fortune 50 corporate intelligence initiatives and received widespread recognition, including the NCSA 2003 Industrial Grand Challenge Award. He has two US patents, a third patent pending, nearly fifty invention disclosures, and has developed technologies across numerous disciplines. Leetaru is the chief architect of the Cline Center's Eventalyzer system, the largest non-governmental open source intelligence initiative in academia, mining global societal stability events 1946-present, and in 2000 founded the NCSA VIAS web mining platform, one of the earliest platforms for "web scale" industry analytics. He authored the first unclassified longitudinal analysis of the CIA FBIS and British SWB open source intelligence news monitoring collections, exploring issues such as topical and source biases and source/sink geographic diffusion patterns, which the CIA published in the March 2010 issue of its flagship *Studies in Intelligence* journal. He established and oversees the Center's mass digitization center, as well as its advanced high performance computing cyberinfrastructure. Over the past decade he has developed a wide range of syntactic and semantic analysis systems designed specifically for globally-sourced content, including autonomous content capture, automatic text categorization, information extraction and classification, and GIS and geospatial intelligence applications of unmodeled text, including geocoding under uncertainty.

## PROFESSIONAL EXPERIENCE

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**2006-present**

**Cline Center for Democracy**

### Founding Coordinator of Information Technology and Research

- Chief Architect of the Center's flagship Eventalyzer project, the largest open source intelligence (OSINT) initiative in academia, using newspaper and open source intelligence products (FBIS and SWB) to catalog societal stability events worldwide 1946-present, codifying 1600 distinct attributes of each, and using the resulting event network for predictive analytics and scenario modeling of state stability over time.
- Established and oversees the Center's mass digitization center, the highest-volume microform center in academia, processing print (70,000+ pages), microfiche (50,000+ fiche totaling over 3M pages of material), and microfilm (1000+ reels totaling 2M+ pages of material). Developed workflows, pipelines, and storage architectures that support 24/7 sustained operation at a fraction of existing best-of-breed operational cost.
- Coordinates data management and research aspects of the Center's large research initiatives.
- Established and oversees the core research technology infrastructure, and advises on technology direction.

- Architect of the Center's cyberinfrastructure and cyberenvironments that underlie its global distributed workforce.
- Assists the Center's large data collection and analysis efforts, liaising with external groups on and off campus.
- Developed and oversees a wide range of syntactic and semantic analysis systems designed specifically for tightly bound accuracy using globally-sourced news content, including automatic text categorization and GIS and geospatial intelligence applications of unmodeled text, including geocoding under uncertainty.
- Architect of the Center's data warehouse, repository, and large-scale data mining and content analysis systems.

**2007-present**

**Carbon Capture Report, University of Illinois at Urbana-Champaign**

Project Director

- Project Director and Chief Architect of the Carbon Capture Report, a free online service of the University of Illinois (<http://www.carboncapturereport.org/>) that monitors a daily global representative sample of climate change news in the mainstream and social media and offers a variety of analytical reports including topical trending and geographic patterns. It automatically identifies person, company, and organization names in news coverage and compiles bibliographic profiles of those names through time, and uses crowdsourcing techniques to autonomously evaluate available information sources.

**2005-present**

**Institute for Computing in the Humanities, Arts, and Social Science**

Chief Technology Advisor

- Advises the Center on technology issues and direction, including strategic planning, infrastructure design, execution, and management. Special emphasis on digitization, digital content management, and machine processing/mining of content.

**2005-2006**

**RiverWeb Project, University of Illinois at Urbana-Champaign**

Project Manager

- Coordinated all aspects of the RiverWeb project and led technical development.
- Designed and developed the digital library system that manages RiverWeb digital content and coordinated the digitization of a number of new works.
- Acted as project technical liaison for several I-CHASS collaborations.

**2000-present**

**National Center for Supercomputing Applications**

Center Affiliate

- Provides technical guidance for several Center projects and acts as a liaison between NCSA and the Cline Center for Democracy.

Undergraduate/Graduate Researcher

- Chief architect and technical director of the NCSA VIAS project. VIAS is an award-winning domain-specific information retrieval, archival, and processing system. It has been at the forefront of a number of Fortune 50 corporate intelligence initiatives and deployed extensively in data mining and intelligence applications for corporate, academic, and governmental clients over the better part of a decade. A VIAS Dynamic Knowledge Repository (DKR) is seeded with a set of topic words, URLs, and other information that define the operational parameters of its topical area. VIAS then monitors all known mailing lists, USENET groups, available wirefeeds, and other streaming sources, as well as autonomously crawls the web using a federation of directed web crawlers to collect information on this topic. All information is screened for relevance against the topical parameter space and then undergoes a series of metadata extraction and production processes, where filters identify people, company, and organization names, bibliographic references, and acronym resolutions, together with higher-order processing such as summary abstract generation. An advanced analytics and visualization suite offers a range of features based on this generated metadata, such as temporal entity graphs and relationship mining.
- Developer of ShadowLight-Mirage. ShadowLight-Mirage is a virtual reality application that allows the creation and exploration of fully immersive worlds in virtual reality. It was the basis for two projects with the US Army Corps of Engineers and was used for almost three years in a University of Illinois senior and graduate level architectural design course and in an outreach program with a local middle school. It was the first virtual reality application that permitted mix-modality content creation in an immersive environment, covering both structured (architectural) design and freehand (artistic) creation.
- Designed and developed numerous data mining, data management and interface applications, ranging from an Office of Naval Research – funded federal grants search and discovery system, to large-scale open source intelligence initiatives.
- Extensive research on Optical Character Recognition (OCR), machine translation, data management, digitization, workflow, and other digital Humanities, Arts, and Social Sciences (HASS) topics.
- Extensive experience transferring and applying advanced computational techniques to the Humanities, Arts, and Social Sciences disciplines.
- Developed and advised numerous data warehousing projects, including HIPAA compliance and large-scale medical records management.

**1995-2001**

### **Gamacles Software Corporation**

#### Company Founder

- Founded Gamacles Software Corporation to commercially distribute hypertext markup language authoring software. Responsible for all aspects of day-to-day operation, including technical, marketing, and business operations. Managed global sales and distributed reseller programs.
- Developed the *UC HTM* Web-authoring suite, the *Vision* dynamic Web content creator, and the *Image Protect* electronic copyright protection technologies.

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#### AWARDS, RECOGNITION, AND SERVICE

- University of Illinois Graduate Scholar in Entrepreneurship – 2009
- Interviewed in Que Leer Magazine - 2009
- University of Illinois Society of Women Engineers Award - 2008
- Champaign Rotary Club Presenter - 2007
- IEEE VR 2007 Paper Reviewer - 2006
- Featured Student-Entrepreneur in the 2005 Kauffman Thoughtbook – 2005

- University Of Illinois Certificate of Appreciation – 2004
- Corecipient of NCSA Industrial Grand Challenge Award – 2003
- Featured Student in Fortune Magazine article on Technology in Campuses – 2002
- Corecipient of NCSA PSP Technology Development Award – 2002
- University of Illinois Student Employee of the Year - 2001

#### PROFESSIONAL SERVICE AND ACTIVITIES

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- Technical Lead, University of Illinois GIS Fair GPS Rally - 2009
- Staff Advisor, University of Illinois Section of the Society of Women Engineers - 2008-2009
- Invited participant at second Director of National Intelligence Open Source Conference - 2008
- Invited participant at inaugural Director of National Intelligence Open Source Conference - 2007
- University of Illinois Campus Round Table - 2007-Present
- Participated in the US-Australia Collaboration Workshop on High-Performance Grids and Applications, Swiss Grand Hotel in Bondi Beach, Sydney, Australia, June 8-9, 2004.

#### PATENTS AND INTELLECTUAL PROPERTY DISCLOSURES

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- Two US patents awarded and one pending patent.
- Nearly 50 Invention Disclosures to the University of Illinois Office of Technology Management.

#### JOURNAL ARTICLES

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- *The Scope of FBIS and BBC Open Source Media Coverage, 1979-2008.* (Unclassified). CIA Studies in Intelligence, Vol. 54, No. 1. (March 2010). Pp. 51-71.
- *New media vs. old media: A portrait of the Drudge Report 2002-2008.* (Issue Headlining Article). First Monday. Vol. 14, Issue 7. (July 6, 2009). Available online at <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2500/2235>
- *Airbrushing History, American Style: The Mutability of Government Documents in the Digital Era.* D-Lib. Vol. 15, Num. 1/2. (January/February 2009). With Scott Althaus. Available online at <http://www.dlib.org/dlib/january09/01inbrief.html#LEETARU>
- *Mass book digitization: The deeper story of Google Books and the Open Content Alliance.* First Monday. Vol. 13, Issue 10. (October 6, 2008). Available online at <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2101/2037>
- *An Open Source Study of International Media Coverage of the WorldCom Scandal.* Journal of International Communication Vol 14, Issue 2. (2008).

#### BOOK CHAPTERS

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- *Instant Messaging as a Hypermedium in the Making,* in Handbook of Research on Computer Mediated Communication. (2008). Editors: Kelsey, Sigrid & St.Amant, Kirk. IGI, Inc.

#### BOOK MANUSCRIPTS

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- Content Analysis: A Data Mining and Intelligence Approach. (Under Review).
- A Practical Guide to Low-Cost Digitization. (Under Review).

#### PROFESSIONAL SOCIETY MAGAZINE ARTICLES

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- *Diversity from the Ground Up.* SWE: Magazine of the Society of Women Engineers. Society of Women Engineers. Conference 2008 issue, pp. 40-46.

- *Your Collegiate Section History is Waiting to be Discovered.* SWE: Magazine of the Society of Women Engineers. Society of Women Engineers. Fall 2008 issue, pp. 62-64. The history initiative this article was based on was a winner of the SWE National 2010 History Award.

#### ELECTRONICALLY PUBLISHED BOOKS

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- *An Analytical Partial Content Analysis Bibliography: 1938-2008.* (2008). Published Electronically. <http://www.clinecenter.uiuc.edu/research/affiliatedresearch/CABibliography/>
- *A Speaker's Guide to Painless and Successful Public Speaking.* (2008). Published Electronically. <http://www.kalevleetar.com/speaking-guidebooks.html>
- *A Student's Perspective: A Crash Course in Career Seeking.* (2008). Published Electronically. <http://www.kalevleetar.com/speaking-guidebooks.html>
- *Profile of a Campus: A Research Project to Profile Higher Education Institutions.* (2006). Published Electronically. <http://www.kalevleetar.com/profileofacampus/>
- *A Historical Survey of the University of Illinois at Urbana-Champaign: A Complete Inventory and Biography of its Buildings, Memorials, Gifts, and Collections and Overview of its Founding and Early Student Life.* (2004). Published Electronically. <http://uihistoriesproject.chass.illinois.edu/>

#### POPULAR MAGAZINE INTERVIEWS

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- *Como Sera el Mundo del Libro en el 2020? Seis expertos predicen el futuro (What will the world of the library look like in 2020? Six experts predict the future)*, interview in Que Leer, article by Alvaro Colomer. January 2009 issue, pp. 38-45.

#### POPULAR MAGAZINE ARTICLES

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- *Class Tree Wars*, in Illinois Alumni Magazine. University of Illinois Alumni Association (Urbana, IL). Nov/Dec 2005 issue, p. 48. Reprint available at [http://www.uiaa.org/urbana/illinoisalumni/pdfs/05\\_novdec2.pdf#pagenum=22](http://www.uiaa.org/urbana/illinoisalumni/pdfs/05_novdec2.pdf#pagenum=22)

#### WHITE PAPERS

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- *Airbrushing History, American Style.* Althaus, S. & Leetar, K. (November 26, 2008). Available at [http://www.clinecenter.uiuc.edu/airbrushing\\_history/](http://www.clinecenter.uiuc.edu/airbrushing_history/). Featured in the New York Times <http://www.nytimes.com/2008/11/25/washington/25documents.html>.

#### INVITED PRESENTATIONS

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- *Open Sources and Foreign Media Analysis: Translation at a Global Scale.* Center for Translation Studies. Invited Guest Lecture, Urbana, Illinois, December 1, 2009.
- *User Interfaces and Information Design for Large-Scale Information Systems.* Design of Usable Information Interfaces (LIS351A) Invited Guest Lecture, Urbana, Illinois, November 30, 2009.
- *Digital Media Management and Large-Scale Digitization and Digital Access: the UIPhotos and UIHistories Projects.* College of Business Office for Information Management (OIM) Brown Bag Seminar Series. University of Illinois, Urbana, Illinois, October 26, 2009.
- *UIPhotos/UIHistories/UITours: A History of the University of Illinois Buildings,* University of Illinois Know Your University (KYU) Lecture Series, Urbana, Illinois, October 20, 2009.
- *The SPEED Project, Automated Event Mining, and Conflict Early Warning.* First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleveland, Ohio, October 16-18, 2009.
- *Collaborative Research In A "Big Data" World: Harnessing Advanced Collaborative Technology For Large-Scale Research.* College of Business Office for Information Management (OIM) Brown Bag Seminar Series. University of Illinois, Urbana, Illinois, October 8, 2009.

- *Airbrushing History, American Style*, with Scott Althaus. Invited Inaugural 2009 Know Your University (KYU) Presentation, University of Illinois, Urbana, Illinois, February 3, 2009.
- *User Interface Design in the Computational Social Sciences and the Representation of Information Through Interface*. University of Illinois Graduate School of Library and Information Science Design of Usable Information Interfaces (LIS351A) Invited Guest Lecture, Urbana, Illinois, December 3, 2008.
- *The SPEED Project and Conflict Early Warning*, with Peter Nardulli, Conflict Early Warning Workshop, Harvard University, Cambridge, Massachusetts, July 9-10, 2008.
- *News Archives, Advanced Information Technologies and Human Rights: An Event Analysis for the Post WW II Era*, with Peter Nardulli, Center for Human Rights Documentation & Research Conference, Columbia University, New York, New York, October 4-6, 2007.
- *UIPhotos/UIHistories/UITours: A History of the University of Illinois Buildings*, The Rotary Club of Champaign, Illinois (District 6490), Urbana, Illinois, September 10, 2007.
- *User Interface Design for Large-Scale Photo and Video Content Delivery Systems*. University of Illinois Graduate School of Library and Information Science Design of Usable Information Interfaces (LIS351A) Invited Guest Lecture, Urbana, Illinois, December 4, 2006.
- *Cataloging a Campus: Information management lessons from the UIPhotos project, a collection of more than 60,000 images of the UIUC campus*, University of Illinois Mobile Mapping for Everyday Spaces Collaborative Initiative Presentation, Urbana, Illinois, February 24, 2006.
- *Cataloging a Campus: Information management lessons from the UIPhotos project, a collection of more than 60,000 images of the UIUC campus*, University of Illinois Graduate School of Library and Information Science ASIS&T Inaugural Semester Presentation, Urbana, Illinois, January 26, 2006. Slides at <http://uiphotos.ncsa.uiuc.edu/presentations/GSLISTalk.pdf>
- *Empowering Students and Educators: Bringing Technology to Non-Technologists*, with Alan Craig, University of Illinois College of Education, Urbana, Illinois, September 7, 2005.
- *Empowering the Entrepreneur: Bringing the Power of Information Technology and the Web to the Entrepreneur*, with Alan Craig, Ewing Marion Kauffman Foundation, Kansas City, Missouri, May 10, 2005.
- *Empowering Students and Educators: Bringing Technology to Non-Technologists*, with Alan Craig, University of Illinois College of Education / NCSA Collaborations Seminar Series (Inaugural Presentation), Urbana, Illinois, March 29, 2005.
- *Empowering the Arts and Humanities*, with Alan Craig, Seedbed Initiative for Transdomain Creativity Meeting, Urbana, Illinois, February 24, 2005.
- *Web Tools for the Humanities*, with Alan Craig, Humanities Computing Summit, Urbana, Illinois, November 27, 2004.
- *Web Tools for Educators*, with Alan Craig, REVITALIZE, Urbana, Illinois (broadcast to North Carolina via Access Grid), June 21, 2004.
- *What's Cool in Visualization and Computing at NCSA and How to Make it from Middle School to Big School*, Distinguished Alumni Presenter, Computer Graphics Workshop, Urbana Middle School, Urbana, Illinois, February 12, 2004.

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#### INVITED CONFERENCE ROUNDTABLES/SESSIONS

- *Manual Crisis Mapping (MCM) & Automated Crisis Mapping (ACM): Hand-Coding, Participatory Mapping and Natural Language Processing*. First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleveland, Ohio, October 16-18, 2009.
- *Automated Event Mining: Approaches and Practices*. First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleveland, Ohio, October 16-18, 2009.

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#### CONFERENCE PUBLICATIONS/PRESENTATIONS

- *The SPEED Project, Automated Event Mining, and Conflict Early Warning*. First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleveland, Ohio, October 16-18, 2009. (Invited).
- *Manual Crisis Mapping (MCM) & Automated Crisis Mapping (ACM): Hand-Coding, Participatory Mapping and Natural Language Processing*. First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleveland, Ohio, October 16-18, 2009. (Invited).
- *Automated Event Mining: Approaches and Practices*. First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleveland, Ohio, October 16-18, 2009. (Invited).
- *The SPEED Project and Conflict Early Warning*, with Peter Nardulli, Conflict Early Warning Workshop, Harvard University, Cambridge, Massachusetts, July 9-10, 2008. (Invited).
- *I-CHASS and RiverWeb: Technology and Outreach*, with James Onderdonk, Great Ideas Sessions, Outreach Scholarship Conference 2007, Madison, Wisconsin, October 7-9, 2007.
- *News Archives, Advanced Information Technologies and Human Rights: An Event Analysis for the Post WW II Era*, with Peter Nardulli, Center for Human Rights Documentation & Research Conference, Columbia University, New York, New York, October 4-6, 2007. (Invited).
- *The use of data mining methods to evaluate public interest in carbon sequestration*, Fifth Annual Conference on Carbon Capture and Sequestration, Alexandria Mark Center, Alexandria, Virginia, May 8-11, 2006. (Poster presentation on CD-ROM proceedings as Poster 075).
- *ShadowLight: A Flexible Environment for Multipurpose Design and Evaluation*, IS&T / SPIE International Symposium on Electronic Imaging Science and Technology, San Jose, California, January 16-20, 2005.
- *ShadowLight: A Flexible Architecture for Immersive Rapid Prototyping and Design*, SIGGRAPH 2004, Los Angeles, California, July 7-12, 2004.

#### UNIVERSITY PUBLICATIONS

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- *Airbrushing History, American Style*. (with Scott Althaus). Cline Center for Democracy at the University of Illinois, Urbana-Champaign. November 25, 2008
- *VLAS: A Pathway to Knowledge*.
- *Phantasm: UIPHOTOS / UIHISTORIES: State of the Art Media Management*.
- *ShadowLight-Mirage: A New Era in Visual Communication*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign.
- *Architectural Design in Immersive Virtual Reality*. With Emma Smith. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign.
- *ShadowLight: A Flexible Architecture for Immersive Rapid Prototyping and Design*. Audio/Video Production, Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. July 7th, 2004. Video Production: Jeff Carpenter
- *Tiled Display Wall Information Pamphlet*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. March 9th, 2002.
- *Technologies of SciVis/VR Information Pamphlet*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. March 8th, 2002.
- *Applications of SciVis/VR Information Pamphlet*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. March 6th, 2002. Available at <http://cave.ncsa.uiuc.edu/applications.pdf>
- *CAVE Information Pamphlet*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. February 26th, 2001.

- *ImmersaDesk2 Information Pamphlet*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. February 26th, 2001.
- *EasyGlasses Multimedia Presentation*. Audio/Video Production, Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. January 10th, 2001. Video Production: Jeff Carpenter
- *The EasyDemo CAVE Users Guide*. Visualization and Virtual Environments Group, National Center for Supercomputing Applications at the University of Illinois, Urbana-Champaign. August 14th, 2000.

## PRESENTATIONS

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- *Open Sources and Foreign Media Analysis: Translation at a Global Scale*. Center for Translation Studies. Invited Guest Lecture, Urbana, Illinois, December 1, 2009. (Invited)
- *User Interfaces and Information Design for Large-Scale Information Systems*. Design of Usable Information Interfaces (LIS351A) Invited Guest Lecture, Urbana, Illinois, November 30, 2009. (Invited)
- *Digital Media Management and Large-Scale Digitization and Digital Access: the UIPhotos and UIHistories Projects*. College of Business Office for Information Management (OIM) Brown Bag Seminar Series. University of Illinois, Urbana, Illinois, October 26, 2009. (Invited)
- *UIPhotos/UIHistories/UITours: A History of the University of Illinois Buildings*, University of Illinois Know Your University (KYU) Lecture Series, Urbana, Illinois, October 20, 2009. (Invited)
- *The SPEED Project, Automated Event Mining, and Conflict Early Warning*. First International Crisis Mapping Conference (ICCM2009). John Carrol University: Cleaveland, Ohio, October 16-18, 2009. (Invited)
- *Collaborative Research In A "Big Data" World: Harnessing Advanced Collaborative Technology For Large-Scale Research*. College of Business Office for Information Management (OIM) Brown Bag Seminar Series. University of Illinois, Urbana, Illinois, October 8, 2009. (Invited)
- *Airbrushing History, American Style*, with Scott Althaus. Invited Inaugural 2009 Know Your University (KYU) Presentation, University of Illinois, Urbana, Illinois, February 3, 2009. (Invited)
- *Metadata in the Digital World: From Libraries to Government*. University of Illinois Graduate School of Library and Information Science Metadata Roundtable, University of Illinois, Urbana, Illinois, January 28, 2009.
- *The SPEED Project and Conflict Early Warning*, with Peter Nardulli, Conflict Early Warning Workshop, Harvard University, Cambridge, Massachusetts, July 9-10, 2008. (Invited).
- *Protocol Development for SPEED*, with Peter Nardulli, Global Development, Information Technology, and the Frontiers of Knowledge: The SID Project, Chicago, Illinois, April 25, 2008.
- *The Social, Political and Economics Events Database (SPEED): Introduction and Update*, with Peter Nardulli, Global Development, Information Technology, and the Frontiers of Knowledge: The SID Project, Chicago, Illinois, April 25, 2008.
- *The SID Data Warehouse*, Global Development, Information Technology, and the Frontiers of Knowledge: The SID Project, Chicago, Illinois, April 25, 2008.
- *UIPhotos/UIHistories/UITours: A History of the University of Illinois Buildings*, The Rotary Club of Champaign, Illinois (District 6490), Urbana, Illinois, September 10, 2007. (Invited)
- *I-CHASS and RiverWeb: Technology and Outreach*, with James Onderdonk, Great Ideas Sessions, Outreach Scholarship Conference 2007, Madison, Wisconsin, October 7-9, 2007.
- *News Archives, Advanced Information Technologies and Human Rights: An Event Analysis for the Post WW II Era*, with Peter Nardulli, Center for Human Rights Documentation & Research Conference, Columbia University, New York, New York, October 4-6, 2007. (Invited).

- *Technology for Funding Funding for Emergency Preparedness & Response*, with Alan Craig, NCSA Private Sector Program Annual Meeting, Urbana, Illinois, June 20, 2006.
- *The use of data mining methods to evaluate public interest in carbon sequestration*, with Hannes Leetaru, NCSA Private Sector Program Annual Meeting, Urbana, Illinois, June 19, 2006.
- *Cataloging a Campus: Information management lessons from the UIPhotos project, a collection of more than 60,000 images of the UIUC campus*, University of Illinois Mobile Mapping for Everyday Spaces Collaborative Initiative Presentation, Urbana, Illinois, February 24, 2006. (Invited)
- *The RiverWeb Project*, University of Illinois Faculty Retreat on Active Learning, Urbana, Illinois, February 10, 2006. HighRes Poster (16MB) at [http://www.riverweb.uiuc.edu/Poster/poster\\_highres.pdf](http://www.riverweb.uiuc.edu/Poster/poster_highres.pdf), LowRes Poster (1MB) at [http://www.riverweb.uiuc.edu/Poster/poster\\_lowres.pdf](http://www.riverweb.uiuc.edu/Poster/poster_lowres.pdf)
- *Cataloging a Campus: Information management lessons from the UIPhotos project, a collection of more than 60,000 images of the UIUC campus*, University of Illinois Graduate School of Library and Information Science ASIS&T Inaugural Semester Presentation, Urbana, Illinois, January 26, 2006.
- *Animation of Air Flow and Pollutant Transmission in an Aircraft Cabin Using the CAVE*, with Yuanhui Zhang and Alan Craig, NCSA/University of Illinois Faculty Fellows 2005-2006 Opening/Keynote Seminar, Urbana, Illinois, September 15, 2005.
- *Empowering Students and Educators: Bringing Technology to Non-Technologists*, with Alan Craig, University of Illinois College of Education, Urbana, Illinois, September 7, 2005. (Invited)
- *Facilitating the Study of Prescriptive Language Behavior Through Automatic Database Building and Data Extraction*, with Douglas Kibbee and Alan Craig, 10th International Conference on the History of the Language Sciences, Urbana, Illinois, September 1, 2005.
- *Empowering the Entrepreneur: Bringing the Power of Information Technology and the Web to the Entrepreneur*, with Alan Craig, Ewing Marion Kauffman Foundation, Kansas City, Missouri, May 10, 2005. (Invited)
- *Content Management Total Productivity Suite: Tools to Empower Small Companies to Set Up and Maintain a Web Presence and Manage Critical Content*, with John McEntire and Alan Craig, Illinois Small Business Development Association 2005 Meeting, Springfield, Illinois, May 3, 2005.
- *Facilitating the Study of Prescriptive Language Behavior Through Automatic Database Building and Data Extraction*, with Douglas Kibbee and Alan Craig, NCSA/University of Illinois Faculty Fellows Brown Bag, Urbana, Illinois, April 20, 2005.
- *Empowering Students and Educators: Bringing Technology to Non-Technologists*, with Alan Craig, University of Illinois College of Education / NCSA Collaborations Seminar Series (Inaugural Presentation), Urbana, Illinois, March 29, 2005. (Invited Speaker)
- *Empowering the Arts and Humanities*, with Alan Craig, Seedbed Initiative for Transdomain Creativity Meeting, Urbana, Illinois, February 24, 2005. (Invited Speaker)
- *Web Tools for the Humanities*, with Alan Craig, Humanities Computing Summit, Urbana, Illinois, November 27, 2004. (Invited Speaker)
- *ShadowLight: A Flexible Environment for Multipurpose Design and Evaluation*, IS&T / SPIE International Symposium on Electronic Imaging Science and Technology, San Jose, California, January 16-20, 2005.
- *ShadowLight: A Flexible Architecture for Immersive Rapid Prototyping and Design*, SIGGRAPH 2004, Los Angeles, California, July 7-12, 2004.
- *Web Tools for Educators*, with Alan Craig, REVITALIZE, Urbana, Illinois (broadcast to North Carolina via Access Grid), June 21, 2004. (Invited Speaker)
- *Debut of a New Web Tool*, with Alan Craig, NCSA Private Sector Program Annual Meeting, Urbana, Illinois, April 27, 2004.
- *NCSA VLAS*, with Alan Craig, NCSA Private Sector Program Annual Meeting, Urbana, Illinois, April 26, 2004.

- *What's Cool in Visualization and Computing at NCSA and How to Make it from Middle School to Big School*, Distinguished Alumni Presenter, Computer Graphics Workshop, Urbana Middle School, Urbana, Illinois, February 12, 2004. (Invited Speaker)
- *Architectural Applications of ShadowLight-Mirage*, American Institute of Architecture Students 2002 Forum, Chicago, Illinois, December 29-31, 2002.
- *NCSA VLAS*, with Alan Craig, National Computational Science Alliance All-hands Meeting, Urbana, Illinois, May 23, 2001.

## EXHIBITIONS

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- *ShadowLight-Mirage in Architecture*, a part of the DIGITAL HEARTLAND EXHIBITION, Connecting >> Midwestern Digital Design in Architecture, sponsored by ACADIA (Association for Computer Aided Design in Architecture). Ball State University Gallery, Fall 2003. ACADIA - Crossroads of Digital Discourse, Indianapolis, IN, Fall 2003. University of Miami, OH, Spring 2004. University of Cincinnati, Spring 2004. ACSA Central States Conference, Elgin, IL, Fall 2004. University of Illinois at Urbana-Champaign, Fall 2004.
- *ShadowLight-Mirage in Learning Environments*, Urbana Middle School, Urbana, Illinois, May 14-23, 2003.
- *Architectural Applications of ShadowLight-Mirage*, American Institute of Architecture Students 2002 Forum, Chicago, Illinois, December 29, 2002 - January 17, 2003.

## COLLECTIONS

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- *UIPhotos/Phantasm*. 80,000 images of the University of Illinois, national, and international sites. Published Electronically. Largest single provider of imagery of the University of Illinois. Over 22,000 use licenses issued. <http://uihistoriesproject.chass.illinois.edu/photoarchive/>

## WORKSHOPS

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- *A Student's Perspective: A Crash Course in Career Seeking*, University of Illinois section of the Society of Women Engineers. University of Illinois at Urbana-Champaign, September 4, 2008.
- *A Speaker's Guide to Painless and Successful Public Speaking*, University of Illinois GradSWE. University of Illinois at Urbana-Champaign, April 30, 2008.
- *A Speaker's Guide to Painless and Successful Public Speaking*, University of Illinois Busey-Evans Residence Hall. University of Illinois at Urbana-Champaign, April 22, 2008.
- *A Student's Perspective: A Crash Course in Career Seeking*, University of Illinois College of Business MS-Tech Program. University of Illinois at Urbana-Champaign, April 14, 2008.
- *A Student's Perspective: A Crash Course in Career Seeking*, University of Illinois section of Delta Delta Delta. University of Illinois at Urbana-Champaign, February 25, 2008.
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