

Reading List

Cyberinfrastructure

- K. McHenry, J. Lee, M. Dietze, P. Kumar, B. Minsker, R. Marciano, L. Marini, R. Kooper, D. Mattson, "**DIBBs Brown Dog, PaaS for SaaS for PaaS**", *XSEDE Reproducibility Workshop*, 2014 ([PDF](#))
- K. McHenry, R. Kooper, P. Bajcsy, "**Towards a Universal, Quantifiable, and Scalable File Format Converter**", *IEEE eScience*, 2009 ([PDF](#))
- M. Ondrejcek, K. McHenry, P. Bajcsy, "**The Conversion Software Registry**", *Microsoft eScience Workshop*, 2010 ([PDF](#))
- L. Marini, R. Kooper, J. Futrelle, J. Plutchak, A. Craig, T. McLaren, J. Myers, "**Medici: A Scalable Multimedia Environment for Research**", *Micro soft eScience Workshop*, 2010, ([PDF](#))
- K. McHenry, R. Kooper, M. Ondrejcek, L. Marini, P. Bajcsy, "**A Mosaic of Software**", *IEEE eScience*, 2011 ([PDF](#))
- K. McHenry, M. Ondrejcek, L. Marini, R. Kooper, P. Bajcsy, "**Towards a Universal Viewer for Digital Content**", *International Conference of Computer Science Executable Paper Workshop*, 2011 ([PDF](#))
- K. McHenry, R. Kooper, L. Marini, M. Ondrejcek, "**The ISDA Tools: Preserving 3D Digital Content**", *POCOS*, 2011 ([PDF](#))
- J. Heard, R. Marciano, "**A System for Scalable Visualization of Geographic Archival Records**", *Large Data Analysis and Visualization*, 2011 ([PDF](#))
- L. Diesendruck, L. Marini, R. Kooper, M. Kejriwal, K. McHenry, "**A Framework to Access Handwritten Information within Large Digitized Paper Collections**", *IEEE eScience*, 2012 ([PDF](#))
- L. Diesendruck, L. Marini, R. Kooper, M. Kejriwal, K. McHenry, "**Digitization and Search: A Non-Traditional Use of HPC**", *IEEE eScience Workshop on Extending High Performance Computing Beyond its Traditional User Communities*, 2012 ([PDF](#))
- L. Marini, P. Bajcsy, S. Padhy, A. Vandercreme, R. Kooper, B. Long, M. Ondrejcek, P. Saba, D. Bonnie, J. Chalfoun, K. McHenry, "**Versus: A Framework for General Content-Based Comparisons**", *IEEE eScience 2012*, ([PDF](#))
- L. Diesendruck, R. Kooper, L. Marini, K. McHenry, "**Using Lucene to Index and Search the Digitized 1940 US Census**", *XSEDE*, 2013 ([PDF](#))

Biology

- M. Dietze, D. LeBauer, R. Kooper, "**On improving the communication between models and data**", *Plant, Cell, and Environment*, 2013 ([PDF](#))
- D. LeBauer, D. Wang, K. Richter, C. Davidson, M. Dietze, "**Feedbacks between measurements and ecosystem models**", *Ecological Monographs*, 2013 ([PDF](#))
- J. Rhemtulla, D. Mladenoff, M. Clayton, "**Historical forest baselines reveal potential for continued carbon sequestration**", *Proceedings of the National Academy of Sciences of the United States of America*, 2009 ([PDF](#))
- L. Schulte, D. Mladenoff, "**The original U.S. public land survey records: their use and limitations in reconstructing pre-European settlement vegetation**", *Journal of Forestry*, 2001

Civil Engineering / Social Science

- W. Sullivan, "**Wellbeing and Green Spaces in Cities**" ([PDF](#))
- W. Sullivan, C. Chang, "**Mental Health and the Built Environment**", *Making Healthy Places: Designing and Building for Health*, 2011 ([PDF](#))
- A. Taylor, F. Kuo, W. Sullivan, "**Views of Nature and Self-Discipline: Evidence from Inner City Children**", *Journal of Environmental Psychology*, 2002 ([PDF](#))
- F. Kuo, W. Sullivan, "**Aggression and Violence in the Inner City**", *Environment and Behavior*, 2001 ([PDF](#))
- Rai, Ankit, "**Designing Green Stormwater Infrastructure for Hydrologic and Human Benefits: An Image-Based Machine Learning Approach**", MS Thesis, U. of Illinois, 2013 ([PDF](#))
- "**Collaborative Research: CyberSEES: Type 2: A New Framework for Crowd-Sourced Green Infrastructure Design**" ([PDF](#), [References](#)) (*has good background and references on green infrastructure and the models we'll be using. We'll be leveraging this project in our use case*)
- S. Brantley, T. White, A. White, D. Sparks, D. Richter, K. Pregitzer, L. Derry, J. Chorover, O. Chadwick, R. April, S. Anderson, R. Amundson, "**Frontiers in Exploration of the Critical Zone**", *Report of a workshop sponsored by the NSF*, 2006 ([PDF](#))
- S. Banwart, J. Chorover, J. Cailardet, D. Sparks, T. White, S. Anderson, A. Aufdenkampe, S. Bernasconi, S. Brantley, O. Chadwick, W. Dietrich, C. Duffy, M. Goldhaber, K. Lehnert, N. Nikolaidis, K. Ragnarsdottir, "**Sustaining Earth's Critical Zone, Basic Science and Interdisciplinary Solutions for Global Challenges**", 2013 ([PDF](#))
- "**Discoveries in the Critical Zone: Where Life Meets Rock**" ([PDF](#))
- P. Le, P. Kumar, D. Drewry, J. Quijano, "**A Graphical User Interface for Numerical Modeling of Acclimation Responses of Vegetation to Climate Change**", *Computers & Geosciences*, 2012 ([PDF](#))
- M. Killey, "**Illinois' Ice Age Legacy**", *Illinois Geological Survey GeoScience Education Series*, 1999 ([PDF](#))
- L. Keefer, E. Bauer, M. Markus, "**Hydrological and Nutrient Monitoring of the Lake Decatur Watershed**", *Illinois State Water Survey Report*, 2010 ([PDF](#))