Karen M. Wickett

Curriculum Vitae

wickett2@illinois.edu
217-417-7622

EDUCATION

University of Illinois at Urbana-Champaign   Ph.D. in Library and Information Science, 2012
Dissertation on formal modeling of relationships between collection-level and item-level metadata, including application of semantic web and linked data principles.

University of Illinois at Urbana-Champaign   M.S. in Library and Information Science, 2007

The Ohio State University   B.S. in Mathematics, 2002

RESEARCH AREAS

- Conceptual and logical foundations of information organization systems
- Semantics of metadata and descriptive vocabularies
- Information modeling for data curation

PEER-REVIEWED PUBLICATIONS

- **Karen M. Wickett.** "A logic-based framework for collection/item metadata relationships." *Journal of Documentation* (In press).

- Andrea K. Thomer, **Karen M. Wickett,** Karen S. Baker, Bruce W. Fouke, and Carole L. Palmer. (2018) "Documenting provenance in non-computational workflows: research process models based on geobiology fieldwork in Yellowstone National Park." *Journal of the Association for Information Science and Technology*. https://doi.org/10.1002/asi.24039

- Ayse Gursoy, **Karen M. Wickett,** Melanie Feinberg. "Understanding Tag Functions in a Moderated, User-Generated Metadata Ecosystem." (2018) *Journal of Documentation* 74(3): 490-508.

- Carole L. Palmer, Andrea K. Thomer, Karen S. Baker, **Karen M. Wickett,** Christine Hendrix, Ann Rodman, Stacey Sigler, and Bruce W. Fouke (2017). "Site-based data curation based on hot spring geobiology." *PLoS ONE* 12(3): e0172090. https://doi.org/10.1371/journal.pone.0172090

- **Karen M. Wickett** (2015). "Accounting for Context in Markup: Which Situation, Whose Semantics?" In *Proceedings of Balisage: The Markup Conference. Balisage Series on Markup Technologies*, vol. 15. https://www.balisage.net/Proceedings/vol15/print/Wickett01/BalisageVol15-Wickett01.html

- Unmil Karadkar, **Karen M. Wickett**, Madhura Parikh, Richard Furuta, Joshua Sheehy, Meghanath Reddy Junnutula, and Jeremy Tzou (2015). "Computationally Supported Collection-level Descriptions in Large Heterogeneous Metadata Aggregations." In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL '15)*. http://dl.acm.org/citation.cfm?doid=2756406.2756970

- **Karen M. Wickett**, Simone Sacchi, David Dubin, and Allen H. Renear (2012). "Identifying Content and Levels of Representation in Scientific Data." *Proceedings of the 75th Annual Meeting of the American Society for Information Science and Technology.*

- **Karen M. Wickett**, Allen H. Renear and Jonathan Furner (2011). "Are Collections Sets?" In *Proceedings of the 74th Annual Meeting of the American Society for Information Science and Technology.*

- Simone Sacchi, **Karen M. Wickett**, Allen H. Renear, David Dubin (2011) "A Framework for Applying the Concept of Significant Properties to Datasets." In *Proceedings of the 74th Annual Meeting of the American Society for Information Science and Technology*.

- Dave Dubin, **Karen M. Wickett** and Simone Sacchi (2011). "Content, format and interpretation." In *Proceedings of Balisage: The Markup Conference. Balisage Series on Markup Technologies*, vol. 7. https://www.balisage.net/Proceedings/vol7/html/Dubin01/BalisageVol7-Dubin01.html

- **Karen M. Wickett**, Allen H. Renear, Richard Urban (2010). "Rule Categories for Collection/Item Metadata Relationships." In Proceedings of the 73rd Annual Meeting of the American Society for Information Science and Technology.

- Allen H. Renear, Simone Sacchi, **Karen M. Wickett** (2010) "Definitions of Dataset in the Scientific and Technical Literature." In *Proceedings of the 73rd Annual Meeting of the American Society for Information Science and Technology.*

- **Karen M. Wickett** (2010) "Discourse situations and markup interoperability: An application of situation semantics to descriptive metadata." In *Proceedings of Balisage: The Markup Conference. Balisage Series on Markup Technologies*, vol. 5. https://www.balisage.net/Proceedings/vol5/html/Wickett01/BalisageVol5-Wickett01.html

- Allen H. Renear and **Karen M. Wickett** (2010) "There Are No Documents." In *Proceedings of Balisage: The Markup Conference. Balisage Series on Markup Technologies*, vol. 5. https://www.balisage.net/Proceedings/vol5/html/Renear01/BalisageVol5-Renear01.html

- Allen H. Renear and **Karen M. Wickett** (2009). "Documents Cannot Be Edited." In *Proceedings of Balisage: The Markup Conference*. https://www.balisage.net/Proceedings/vol3/print/Renear01/BalisageVol3-Renear01.html

OTHER PUBLICATIONS

- Nicholas M. Weber and **Karen M. Wickett** (2016). Introduction to Data Models Special Collection. Data Science Journal. 15, p.14. http://datascience.codata.org/articles/10.5334/dsj-2016-014/

- **Karen M. Wickett**, Antoine Isaac, Martin Doerr, Katrina Fenlon, Carlo Meghini, and Carole Palmer (2014). "Representing Cultural Collections in Digital Aggregation and Exchange Environments". *D-Lib Magazine* v.20 no.5/6. http://www.dlib.org/dlib/may14/wickett/05wickett.html

- **Karen M. Wickett** (2012). *Collection/Item Metadata Relationships*. PhD Dissertation, University of Illinois. https://www.ideals.illinois.edu/handle/2142/42198

- **Karen M. Wickett**, Xiao Hu, and Andrea Thomer (2012). "RDAP12 Summit: Challenges and Opportunities for Data Management" *Bulletin of the American Society for Information Science and Technology* v.38 no.5, June/July 2012. http://asis.org/Bulletin/Jun-12/JunJul12_Wickett_Hu_Thomer.html

PROFESSIONAL EXPERIENCE

2018-   Assistant Professor
School of Information Sciences at University of Illinois at Urbana-Champaign
- Conduct independent research on metadata semantics and the application of logical modeling and linked data principles to bibliographic, scientific, and cultural heritage metadata.
- Develop and teach courses in information organization, information modeling, database management, and the core concepts of the information field.

2014-2018   Assistant Professor
School of Information at University of Texas at Austin
- Research and teaching in information organization, metadata, and information science as a field.

- Curriculum development and assessment, and strategic planning for the school.
- Service on Research Environment Committee, Web Committee, and Curriculum Committee, and the University of Texas Faculty Council.
- Regular advising and administration for MSIS students.
- Research advising and committee service for PhD students.
  - Committee member for Julia Bullard – graduated 2017
  - Chair for Ayse Gursoy – anticipated graduation 2019

2012-2013   Postdoctoral Research Associate
Center for Informatics Research in Science and Scholarship (CIRSS),
Graduate School of Library and Information Science University of Illinois at Urbana-Champaign

- Taught courses in Data Curation and Information Modeling.
- Lead collaboration between CIRSS and Europeana on application of the Europeana Data Model and linked data principles to collection metadata in large-scale metadata aggregations.
  - Organized and led collaborative workshop hosted at CIRSS.
  - Developed recommendations for representation for collections in digital repositories and aggregations.
  - Organized and conducted tutorial at Joint Conference on Digital Libraries 2013 on the Europeana Data Model and its application to collection-level objects. Introduced participants to linked open data modeling principles and the Europeana Data Model, and explored the role that collections play in adding value to digital libraries.
  - Organized workshop at iConference 2014 on Digital Collection Contexts, with Carole L. Palmer and Antoine Isaac; on representation of digital collections in large-scale aggregations and repositories using linked data, logical modeling, and computation.
- IMLS funded Site-Based Data Curation project on workflow modeling and metadata frameworks for samples and data collected at scientifically significant sites.
  - Organized and conducted stakeholder workshop of geobiologists who collect data and samples at Yellowstone National Park to understand needs and challenges for creating and sharing re-usable datasets.
  - Retrospective analysis of data and associated materials from data and sample collection field trips to identify activities and artifacts for workflow modeling, development of research process modeling technique.
  - Information modeling analysis and development of UML model for a Minimum Information Framework for geobiology at Yellowstone National Park.

2008-2012   Research Assistant
Graduate School of Library and Information Science University of Illinois at Urbana-Champaign

- IMLS Digital Collections and Content project
  - Analyzed logical relationships between collection and item metadata to support integration of collection-level and item-level metadata in digital repositories and aggregations.
  - Research logical foundations of metadata management in linked data environments.
- NSF Data Conservancy project
  - Research on foundational principles and conceptual analysis of scientific and humanities data curation, including analysis of definitions of the concept of a dataset across scientific domains, and framework for the application of the concept of significant properties to datasets.

2007-2012   Teaching Assistant and Instructor
Graduate School of Library and Information Science University of Illinois at Urbana-Champaign

- Teaching assistant for Information Organization and Access (MSLIS core course), Libraries Information and Society (MSLIS core course), Cataloging and Classification, and Information Modeling.
- Instructor for Information Modeling, included on list of instructors ranked excellent by their students.

- Extensive experience with online course design and teaching.

2002-2006 **Library Assistant II-III**
University of California Davis Libraries
- Serials copy-cataloging with AACR2 following CONSER guidelines, analysis of bibliographic serial records, and updating serial holdings records in local and shared databases.
- Management of Health Sciences bindery and preservation operations and section leader for serials maintenance and control. Supervision and management of bindery assistant.
- Development of procedures and standards to ensure preservation of materials and access to resources, and training of staff in technical features of integrated library system.

RECENT RESEARCH AND SERVICE ACTIVITIES

- Co-editor of Data Science Journal special collection on Data Models, with Nicholas Weber.

- Member of 2017-18 University of Texas Faculty Council, representing Assistant Professors and Lecturers.

  o Faculty Council representative on C13 – Information Technology Committee, advising the Faculty Council, Chief Information Officer and president on information technology policies and procedures.

- Organized University of Texas School of Information Research Colloquium, 2014-2016.

- Organized workshop at iConference 2014 on Digital Collection Contexts, with Carole L. Palmer and Antoine Isaac; on representation of digital collections in large-scale aggregations and repositories using linked data, logical modeling, and computation.

- Organized and conducted tutorial at Joint Conference on Digital Libraries 2013 on the Europeana Data Model and its application to collection-level objects. Introduced participants to linked open data modeling principles and the Europeana Data Model, and explored the role that collections play in adding value to digital libraries.

- Founded and organized Conceptual Foundations Group, a collaborative research and discussion group at the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign. The group focused on the application of formal methods to foundational concepts in information organization, including descriptive metadata, digital objects and text mark-up.

- Reviewer for the Journal of the Association for Information Science and Technology (JASIST), the Journal of Biomedical Discovery and Collaboration, the Journal of the Text Encoding Initiative, iConference, ASIS&T Annual Meeting.

AWARDS

- Temple Teaching Fellowship
  School of Information, University of Texas at Austin, 2014-2015

- Berner-Nash Award for Outstanding Doctoral Dissertation
  Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign, 2012

- Hazel C. Rediger Award
  Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign, 2007

- Ruth Gordon Departmental Award
  Department of Mathematics, The Ohio State University, 2002

- Distinguished Scholar – National Merit Scholarship
  The Ohio State University, 1998-2002