Résumé

Angela M. Zoss, Ph.D.

Education

Indiana University. (2018). Ph.D. in Information Science. Minor in Informatics. ***Network Visualization Literacy: Task, Context, and Layout*** (Dissertation). Supervised by Drs. Katy Börner, Hamid Ekbia, Staša Milojević, and Johan Bollen.

Cornell University. (2008). M.S. in Communication. Member of Culturally-Embedded Computing Group and HCI Lab. ***From Measure to Leisure: Extending Theory on Technology in the Workplace*** (Thesis). Supervised by Drs. Geri Gay, Tarleton Gillespie, and Phoebe Sengers.

Indiana University. (2003). B.A. in Communication & Culture, Cognitive Science. Minors in Computer Science, Music.

Work Experience

Assessment and Data Visualization Analyst (May 2018-present)
Assessment & User Experience Department, Duke University Libraries — Durham, NC

Data Visualization Coordinator (June 2012-April 2018)
Data and Visualization Services Department, Duke University Libraries — Durham, NC

Adjunct Instructor (January 2010-May 2012)
School of Library and Information Science, Indiana University — Bloomington, IN

Research Assistant (August 2008-August 2011)
Cyberinfrastructure for Network Science Center, SLIS, Indiana University — Bloomington, IN

arXiv.org Administrator (July 2006-July 2008)
Digital Library and Information Technologies, Cornell University Library — Ithaca, NY

Publications

Theses/Dissertations

- Zoss, Angela M. (2018). ***Network Visualization Literacy: Task, Context, and Layout*** (Doctoral dissertation). Supervised by Dr. Katy Börner. School of Informatics, Computing, and Engineering, Indiana University: Bloomington, IN.

- Zoss, Angela M. (2008). *From Measure to Leisure: Extending Theory on Technology in the Workplace* (Master's thesis). Supervised by Dr. Geri Gay. Department of Communication, Cornell University: Ithaca, NY.

Journal Articles

- Stipelman, Brooke A., Hall, Kara L., Zoss, Angela M., Okamoto, Janet, Stokols, Daniel and Börner, Katy. (2014). **Mapping the Impact of Transdisciplinary Research: A Visual Comparison of Investigator-Initiated and Team-Based Tobacco Use Research Publications**. *Journal of Translational Medicine & Epidemiology, 2*(2), 1033.

- Zoss, Angela M. (2012). **Seeding a field: The growth of bibliometrics through co-authorship ties**. *Bulletin of the American Society for Information Science and Technology, 38*(6), 29-32. doi:10.1002/bult.2012.1720380608

- Börner, Katy, Klavans, Richard, Patek, Michael, Zoss, Angela M., Biberstine, Joseph R., Light, Robert P., Larivière, Vincent and Boyack, Kevin W. (2012). **Design and update of a classification system: the UCSD map of science**. *PLoS One, 7*(7), e39464. doi:10.1371/journal.pone.0039464

- Zoss, Angela M. and Börner, Katy. (2012). **Mapping interactions within the evolving science of science and innovation policy community**. *Scientometrics, 91*(2), 631-644. doi:10.1007/s11192-011-0574-8

- Börner, K., Huang, W. (B.), Linnemeier, M., Duhon, R. J., Phillips, P., Ma, N., Zoss, Angela M., Guo, H. and Price, M. A. . (2010). **Rete-netzwerk-red: analyzing and visualizing scholarly networks using the Network Workbench Tool**. *Scientometrics, 83*(3), 863-876. doi:10.1007/s11192-009-0149-0

- Börner, Katy, Ma, Nianli, Duhon, Russell J. and Zoss, Angela M. (2009). **Science & technology assessment using open data and open code**. *IEEE Intelligent Systems, 24*(4), 78-81. doi:10.1109/MIS.2009.68

Book Chapters

- Zoss, Angela M., Maltese, Adam, Uzzo, Stephen Miles and Börner, Katy. (2018). **Network Visualization Literacy: Novel Approaches to Measurement and Instruction**. In Cramer, Catherine, Porter, Mason A., Sayama, Hiroki, Sheetz, Lori and Uzzo, Stephen Miles (Eds.), *Network Science In Education* (pp. 169-187). : Springer International Publishing. doi:10.1007/978-3-319-77237-0_11

- Zoss, Angela M. (2016). **Challenges and Solutions for Short-Form Data Visualization Instruction**. In Joshi, Alark, Adar, Eytan, Engle, Sophie, Hearst,

Marti and Keefe, Daniel (Eds.), *Pedagogy of Data Visualization, Workshop at IEEE VIS 2016* (pp.). Baltimore, MD: .

- Zoss, Angela M. (2016). **Designing Public Visualizations of Library Data**. In Magnuson, L. (Eds.), *Data Visualization: A Guide to Visual Storytelling for Librarians* (pp. 19-44). Lanham, MD: Rowman & Littlefield Publishers, Inc.. doi:10.6084/m9.figshare.3811713.v1

- Zoss, Angela M. (2014). **Cognitive processes and traits related to graphic comprehension**. In Huang, M. and Huang, W. (Eds.), *Innovative Approaches of Data Visualization and Visual Analytics* (pp. 94-110). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-4309-3.ch005

- Zoss, Angela M., Conover, Michael and Börner, Katy. (2010). **Where Are the Academic Jobs? Interactive Exploration of Job Advertisements in Geospatial and Topical Space**. In Chai, S.-K., Salerno, J. and Mabry, P. L. (Eds.), *Advances in Social Computing: Third International Conference on Social Computing, Behavioral Modeling and Prediction, SBP10* (pp. 238-247). Bethesda, MD: Springer. doi:10.1007/978-3-642-12079-4_30

Conference Papers

- Kouper, Inna, Zoss, Angela M., Edelblute, Trevor, Boyles, Michael and Ekbia, Hamid. (2016). **Mental Disorders Over Time: A Dictionary-Based Approach to the Analysis of Knowledge Domains**. Paper presented at *iConference 2016 Proceedings*, Philadelphia, PA. doi:10.9776/16303

- Stamper, Michael J., Kong, Chin Hua, Ma, Nianli, Zoss, Angela M. and Börner, Katy. (2011). **MAPSustain: Visualising biomass and biofuel research**. Paper presented at *Making Visible the Invisible: Art, Design and Science in Data Visualization*, University of Huddersfield, United Kingdom.

- Boehner, Kirsten, Thom-Santelli, Jenn, Zoss, Angela, Gay, Geri, Hall, Justin S. and Barrett, Tucker. (2005). **Imprints of place: Creative expressions of the museum experience**. Paper presented at *ACM CHI 2005, Conference on Human Factors in Computing Systems*, Portland, OR. doi:10.1145/1056808.1056881

White Papers

- Börner, Katy and Zoss, Angela M. (2010). **Evolving and emerging populations and topics**. White paper for CISE/SBE Advisory Committee on Research Portfolio Analysis, National Science Foundation.

Projects

- ***Breaking the Bundle: Analyzing Duke's Journal Subscriptions*** (November 2018 to March 2020)

  A data science project to combine and visualize various measures of value for Duke's journal subscriptions in an attempt to optimate subscription purchases and improve journal pricing transparency.

  Responsibilities:

  - Led student team during 10-week summer data science experience

  - Compiled raw datasets for team, including the development of scripts to make API calls

  - Post summer, refactored and extended R code generated by student team to improve logic, update Shiny app interface, and make the project more generalizable to different institutions and vendors

- ***FOLIO (The Future of Libraries is Open), Library Data Platform*** (September 2018 to present)

  "FOLIO is a collaboration of libraries, developers and vendors building an open source library services platform. It supports traditional resource management functionality and can be extended into other institutional areas." -folio.org

  Responsibilities:

  - Since joining the Reporting Special Interest Group (SIG) in September 2018, have held progressively more advanced leadership roles. Currently a member of the Reporting SIG leadership team, working as project manager and primary advisory for query development.

  - Responsibilities include database testing, loading data, generating test data, writing queries for both PostgreSQL and Amazon Redshift databases, reviewing queries for logic and style, creating and maintaining JIRA issues and wiki documentation, and maintaining the GitHub repository.

- ***Network Visualization Literacy: Task, Context, and Layout*** (Fall 2010 to Spring 2018)

  My dissertation research on network visualization literacy included an opinion survey to identify prominent issues in network visualization comprehension and a large-scale user study of the comprehension of network visualizations.

Responsibilities:

- o Surveyed 51 network science researchers to identify target visualization features

- o Created a series of visualizations with systematic manipulations in numerical and graphical properties

- o Constructed a series of quantitative network visualization analysis tasks

- o Recruited hundreds of subjects to complete online test of network visualization comprehension

- o Developed R scripts to process sample network datasets, conduct network statistics and clustering algorithms, generate test visualizations, process participant response data, apply mixed effects models, and visualize results

- **Mental Disorders Over Time** (June 2014 to January 2016)

- **Diseases across the Top Five Languages of the PubMed Database: 1961-2012** (January 2014 to June 2014)

  A team submission to the Data Visualization Challenge for WebSci'14. Original dataset of historical MEDLINE/PubMed article titles was enhanced with additional metadata and parsed for references to diseases. Visualization received the Best Student Award.

  Responsibilities:

  - o Developed python scripts to locate disease phrases in article titles

  - o Developed exploratory visualizations in a variety of tools to help the team narrow down to a particular narrative approach

  - o With continued feedback from team members, designed the submitted visualization using Raw Graphs, Wordle, and Adobe Illustrator.

- **Growth of Bibliometrics** (May to June 2012)

- **SciSIP Community**

- **Updating Maps of Science** (Jan. 2011 to July 2011)

  Collaborators: Richard Klavans, Michael Patek, Joseph Biberstine, Vincent Larivière, Kevin W. Boyack, Katy Börner, Angela Zoss

  Recent research has explored how extant maps of science can be systematically and usefully updated to reflect the constantly evolving environment of science.

- ***MAPSustain*** (Jan. 2010 to Dec. 2010)

  Collaborators: Chin Hua Kong, Nianli Ma, Michael J. Stamper, Angela Zoss, Katy Börner

  MapSustain, building off the Job Map, visualizes funding, publication, and patent data related to sustainability research on linked geospatial and topic maps.

- ***JobMap*** (Jan. 2009 to May 2010)

  Collaborators: Angela Zoss, Michael Conover, Katy Börner

  In the Job Map, job postings collected via RSS feeds are visualized geospatially and topically (overlaid on a Map of Science). Also accepted as a map to the Places & Spaces: Mapping Science exhibit, 6th iteration (U.S. Job Market map).

- ***NSF Discovery in Research Portfolio*** (Apr. 2010 to Oct. 2010)

  Collaborators: Angela Zoss, Katy Börner

  NSF CISE and SBE Advisory Committees contracted several teams to act as a subcommittee and help in identifying tools and approaches that would be effective for proposal analysis in order to better support Program Officers in short-term and long-term goals.

- ***Evaluation of Transdisciplinary Tobacco Use Research Centers (TTURC)*** (Aug. 2008 to June 2010)

  Collaborators: David Berrigan, Annie Feng, Kara Hall, Stephen Marcus, Glen Morgan, Brooke Stipelman, Daniel Stokols, Amanda L. Vogel, Angela Zoss, Katy Börner

  This project involves a series of bibliometric analyses and visualizations that aid in the evaluation of TTURC projects. Visualizations include geographic visualizations, co-authorship networks, Map of Science overlays, and keywords networks.

  This research was supported in part by the National Cancer Institute at the National Institutes of Health [contract number HHSN261200800812].

- ***Master's Thesis – Sandbox***

- ***Imprints in the Museum*** (Aug. 2004 to Dec. 2004)

Certifications

- RStudio Instructor - tidyverse, February 2021

- Tableau Desktop Specialist, June 2019

Skills and Experience

- **Data wrangling**: Open Refine, R, Python, bash scripting

- **Databases**: PostgreSQL, MySQL, Amazon Redshift, Airtable, Microsoft Access

- **Graphic design and layout**: Adobe Illustrator, Adobe InDesign, Inkscape, Swift Publisher

- **Statistical/data science software**: R, JMP, Python, Stata

- **Visualization**: Excel, Tableau, R/tidyverse, Google Data Studio, Plot.ly, Gephi, RAW, JMP

- **Web/CMS/Interface**: Wordpress, Drupal, R Shiny, HTML/CSS/JavaScript

Awards/Honors

- Zoss, Angela M., Edelblute, Trevor and Kouper, Inna. (2014). **Diseases across the Top Five Languages in PubMed**. Visualization submitted to Data Challenge at ACM Web Science 2014 Conference. Bloomington, IN. Won "Student Best Entry" award.

Teaching Activities and Presentations

Semester-Length Teaching Experiences

- Krishna, Anirudh, Zoss, Angela M. and Nolan, Sarah. (Fall 2017 to Spring 2018). **Visualizing Social Mobility in the Developing World**. Year-long research-based course and project at Duke University, Durham, NC.

- Zoss, Angela M. (Spring 2012). **Information Visualization** . Semester-long course at Indiana University, Bloomington, IN.

- Zoss, Angela M. (Summer 2011). **Emerging Technologies and Libraries**. Half-semester-long course at Indiana University, Bloomington, IN.

- Zoss, Angela M. (Summer 2011). **Collection Development and Management**. Semester-long course at Indiana University, Bloomington, IN.

- Gay, Geri, Leshed, Gilly and Zoss, Angela M. (Spring 2006). **Human-Computer Interaction**. Semester-long course at Cornell University, Ithaca, NY.

Extended Workshop Instruction Experiences

- Zoss, Angela M. (September 26 and 27, 2019). **Data visualization workshop**. Half-day workshop for library data professionals at State Library of North Carolina – Library Data Users' Group, Chapel Hill, NC and Statesville, NC.

- Zoss, Angela M. (August 1, 2019). **Visualization for data science in R**. Two-day course at Data Matters Data Science Short Course Series, sponsored by the National Consortium for Data Science, The Odum Institute, and RENCI, Raleigh, NC.

- Zoss, Angela M. and Monson, Eric. (July 1, 2018). **Designing Academic Figures and Posters**. One-day workshop for undergraduates at Duke University Marine Lab, Research Experience for Undergraduates in Estuarine and Coastal Marine Systems, Beaufort, NC.

- Zoss, Angela M. (June 1, 2018). **Introduction to data visualization**. One-day course for library professionals at the Data Science and Visualization Institute for Librarians, sponsored by North Carolina State University, Raleigh, NC.

- Zoss, Angela M. (August 1, 2018). **Visualization for data science in R**. Two-day course at Data Matters Data Science Short Course Series, sponsored by the National Consortium for Data Science, The Odum Institute, and RENCI, Raleigh, NC.

- Zoss, Angela M. and Monson, Eric. (July 1, 2017). **Designing Academic Figures and Posters**. One-day workshop for undergraduates at Duke University Marine Lab, Research Experience for Undergraduates in Estuarine and Coastal Marine Systems, Beaufort, NC.

- Zoss, Angela M. (April 1, 2017). **Introduction to data visualization**. One-day course for library professionals at the Data Science and Visualization Institute for Librarians, sponsored by North Carolina State University, Raleigh, NC.

- Zoss, Angela M. (May 1, 2017). **Introduction to data and visualization for humanities scholars**. Three-day course at the Digital Scholarship Bootcamp, hosted by University of Tennessee, Knoxville, Knoxville, TN.

- Zoss, Angela M. (August 1, 2017). **Visualization for data science in R**. Two-day course at Data Matters Data Science Short Course Series, sponsored by the National Consortium for Data Science, The Odum Institute, and RENCI, Raleigh, NC.

- Zoss, Angela M. (January 1, 2017). **Visualization week**. Week-long residency at Project VIS at Skidmore College, Sarasota Springs, NY.

- Joque, Justin, Rutkowski, Andy and Zoss, Angela M. (June 1, 2016). **Making sense of data through visualization**. One-day pre-conference program at Annual meeting of the American Library Association, Orlando, FL.

- Zoss, Angela M. and White, Russ. (September 1, 2016). **Introduction to data visualization**. One-day workshop at Special Libraries Association Southern California Chapter, Professional Development Day, Long Beach, CA.

- Zoss, Angela M. and Monson, Eric. (June 1, 2016). **Designing Academic Figures and Posters**. One-day workshop for undergraduates at Duke University Marine Lab, Research Experience for Undergraduates in Estuarine and Coastal Marine Systems, Beaufort, NC.

- Zoss, Angela M. (May 1, 2016). **Introduction to data visualization**. One-day course for library professionals at the Data Science and Visualization Institute for Librarians, sponsored by North Carolina State University, Raleigh, NC.

- Zoss, Angela M. (June 1, 2016). **Introduction to information visualization**. Two-day course at Data Matters Data Science Short Course Series, sponsored by the National Consortium for Data Science, The Odum Institute, and RENCI, Chapel Hill, NC.

- Zoss, Angela M. and Monson, Eric. (June 1, 2015). **Designing Academic Figures and Posters**. One-day workshop for undergraduates at Duke University Marine Lab, Research Experience for Undergraduates in Estuarine and Coastal Marine Systems, Beaufort, NC.

- Joque, Justin and Zoss, Angela M. (June 1, 2015). **Data visualization in the library: Collections, tools, and scalable services**. Half-day conference program at Annual meeting of the American Library Association, San Francisco, CA.

- Zoss, Angela M. (October 1, 2015). **Introduction to data visualization**. One-day course for NCSU library staff at North Carolina State University Libraries' week-long series of data science short courses, Raleigh, NC.

- Zoss, Angela M. (June 1, 2015). **Introduction to information visualization**. Two-day course at Data Matters Data Science Short Course Series, sponsored by the National Consortium for Data Science, The Odum Institute, and RENCI, Chapel Hill, NC.

- Zoss, Angela M. and Monson, Eric. (June 1, 2014). **Designing Academic Figures and Posters**. One-day workshop for undergraduates at Duke University

Marine Lab, Research Experience for Undergraduates in Estuarine and Coastal Marine Systems, Beaufort, NC.

Presentations at Conferences, Professional Gatherings

- Forzetting, Sarah, Sidman, Angela and Zoss, Angela M. (March 11, 2020). **Protecting patron privacy - what are the issues and what can we do?**. Panel presentation at 2020 Electronic Resources & Libraries Annual Conference (ER&L2020), Austin, TX.

- Zoss, Angela M. (March 9, 2020). **Building an Open Source Reporting Platform for FOLIO**. Poster presentation at 2020 Electronic Resources & Libraries Annual Conference (ER&L2020), Austin, TX.

- Zoss, Angela M. (March 10, 2020). **Partnering with Data Science Students on Journal Usage Analysis**. Presentation at 2020 Electronic Resources & Libraries Annual Conference (ER&L2020), Austin, TX.

- Zoss, Angela M. (January 23, 2020). **Reporting 101: Using the Library Data Platform (LDP) for Library Reporting**. Presentation and demonstration at 2020 World Open Library Foundation Conference (WOLFCon 2020), College Station, TX.

- Nassar, Nassib, Beltaine, Sharon, Zoss, Angela M. and Walker, Kevin. (February 12, 2020). **FOLIO Reporting with the Library Data Platform**. Webinar at FOLIO Forum, presented online..

- Zoss, Angela M. (March 5, 2019). **Tools and Techniques for Scalable Survey Analysis**. Accepted conference presentation at Designing for Digital (D4D) Conference 2019, Austin, TX.

- Zoss, Angela M. (March 6, 2019). **Improving Stakeholder Communication with Data Visualizations**. Accepted conference seminar at Designing for Digital (D4D) Conference 2019, Austin, TX.

- Zoss, Angela M. (July 31, 2019). **Accessibility in Word and PowerPoint**. Hands-on workshop at Duke University Libraries – Librarians' Summer Camp, Durham, NC.

- Zoss, Angela M. (August 1, 2019). **Data cleaning and manipulation with OpenRefine**. Hands-on workshop at Duke University Libraries – Librarians' Summer Camp, Durham, NC.

- Zoss, Angela M., Nelson, Rob, Hall, Josh and Eily, Ariana. (April 6, 2019). **SciArt & Multimedia**. Invited panel presentation at 2019 ComSciCon – Triangle Communicating Science Workshop, Durham, NC.

- Zoss, Angela M. (October 18, 2019). **Thinking (and teaching) critically for data visualization**. Invited presentation at North Carolina State University Libraries' Coffee and Viz series, Raleigh, NC.

- Herndon, Joel, Joque, Justin and Zoss, Angela M. (May 24, 2017). **Cheap, fast, or good - pick two: Data instruction in the age of data science**. Accepted conference panel at IASSIST Annual Conference 2017, Lawrence, KS.

- Zoss, Angela M., Edelblute, Trevor and Kouper, Inna. (May 26, 2017). **Data quality, transparency and reproducibility in large bibliographic datasets**. Accepted conference presentation at IASSIST Annual Conference 2017, Lawrence, KS.

- Zoss, Angela M. (May 3, 2017). **Visualization for Data Science**. Webinar at DataBytes series, sponsored by the National Consortium for Data Science, offered online.

- Beyer, Johanna, Domik, Gitta, Johnson, Andrew and Zoss, Angela M. (October 23, 2016). **Curriculum Design**. Accepted member of panel at Pedagogy of Data Visualization Workshop at IEEE VIS 2016, Baltimore, MD.

- Zoss, Angela M. (December 14, 2016). **Data Visualization Support**. Invited webinar at Oklahoma State University Libraries, offered online.

- Zoss, Angela M. (July 18, 2014). **Design and support recommendations from data visualization research**. Invited presentation at Science Boot Camp Southeast, Raleigh, NC.

- Boyer, Josh, Wirz, Jackie and Zoss, Angela M. (June 28, 2014). **New Directions for Data Visualization in Library Public Services**. Panel presentation at Annual meeting of the American Library Association 2014, Las Vegas, NV.

- Zoss, Angela M. (March 28, 2014). **From imagination to visualization: Getting comfortable with data representations**. Presentation at THATCamp Digital Knowledge 2014, Raleigh, NC.

- Zoss, Angela M. (December 10, 2013). **Visualizing (:) A New Data Support Role for Duke University Libraries**. Accepted presentation at Coalition for Networked Information (CNI) Fall 2013 Meeting, Washington DC.

- Zoss, Angela M. (July 23, 2013). **Visualization Support at Duke University Libraries**. Poster presentation at Gordon Research Conference on Visualization in Science & Education, Smithfield, RI.

- Zoss, Angela M. (March 29, 2012). **Preparing to incorporate visualizations into a *metrics research project**. Webinar at American Society for Information

Science and Technology (ASIS&T) and its Special Interest Group on Metrics (SIG/MET), offered online.

- Zoss, Angela M. and Börner, Katy. (July 6, 2011). **Mapping interactions within the evolving Science of Science and Innovation Policy community**. Accepted presentation at 13th International Society of Scientometrics and Informetrics (ISSI) conference, Durban, South Africa.

- Zoss, Angela M. (July 4, 2011). **Testing comprehension of informetric visualizations**. Accepted presentation at Doctoral Forum of the 13th International Society of Scientometrics and Informetrics (ISSI) conference, Durban, South Africa.

- Zoss, Angela M. (February 8, 2011). **Analysis and Visualization of Science**. Presentation at Workshop on Scholarly Communication and Bibliometrics, iConference 2011, Seattle, WA.

- Zoss, Angela M. (March 23, 2011). **Tools for Multivariate, Evolving Scientometric Visualizations**. Presentation at 2011 Workshop on Mining the Digital Traces of Science, Paris, France.

- Zoss, Angela M. (July 8, 2010). **Information Visualization and Network Workbench: Incorporating Cyberinfrastructure into Instruction**. Presentation at 2010 HarambeeNet Workshop on Social Networks as an Introduction to Computer Science, Durham, NC.

- Zoss, Angela M., Conover, Michael and Börner, Katy. (March 31, 2010). **Where are the academic jobs? Interactive exploration of job advertisements in geospatial and topical space**. Presentation at 2010 International Conference on Social Computing, Behavioral Modeling, & Prediction (SBP10), Bethesda, MD.

- Zoss, Angela M. (August 12, 2009). **Analyzing and Visualizing the Structure and Evolution of the World Wide Science**. Presentation at Information Kinetics: Egoviz Workshop hosted by Arteleku, San Sebastián, Spain.

- Zoss, Angela M. and Börner, Katy. (November 8, 2008). **Mapping Transdisciplinary Tobacco Use Research Centers (TTURC) Publications onto the Landscape of the Tobacco Research Field**. Accepted presentation at 2008 Annual Conference of the American Evaluation Association, Denver, Colorado.

- Boehner, Kirsten, Thom-Santelli, Jenn, Zoss, Angela M., Gay, Geri, Barrett, Tucker and Hall, Justin S. (May 29, 2005). **Imprints in the Museum: Social Navigation Technology for Participatory Expression**. Poster presentation at International Communication Association (ICA) 2005, New York City, NY.

Guest Lectures

- Zoss, Angela M. (November 7, 2019). **Big Data Ethics**. Guest lecture at undergraduate Information Science + Studies course on The Googlization of Knowledge, Durham, NC.

- Zoss, Angela M. (February 8, 2019). **Usability Studies for Data Visualization**. Guest lecture and activity at graduate Interdisciplinary Data Science course on Data Visualization, Durham, NC.

- Zoss, Angela M. (April 11, 2018). **Data Visualization, Information Design**. Guest lecture at undergraduate course in Art, Art History & Visual Studies on Introduction to Architectural Design, Durham, NC.

- Zoss, Angela M. (February 20, 2018). **Introduction to Effective Data Visualization**. Guest lecture at graduate Public Policy course called Public Policy Presentation Practicum, Durham, NC.

- Zoss, Angela M. (March 19, 2018). **Network Visualizations**. Guest lecture at undergraduate Sociology course on Managing Networks, Durham, NC.

- Zoss, Angela M. (November 27, 2018). **Visual Analytics in Libraries**. Guest lecture at undergraduate/graduate Information and Library Science course on Visual Analytics, Chapel Hill, NC.

- Zoss, Angela M. (March 21 and April 2, 2018). **Introduction to Effective Data Visualization**. Guest lecture and visualization contest at undergraduate Computer Science course called Everything Data, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (January 29 and 31, 2018). **Data Visualization & Exploration**. Two-part guest lecture and activity at undergraduate Statistical Science course on Data Science, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (March 23, 2017). **Practical Data Visualization**. Guest lecture at Bass Connections course called Energy Data Analytics Lab, Durham, NC.

- Zoss, Angela M. (October 25, 2017). **Visualizing Qualitative Data**. Guest lecture at graduate Environment course on Applied Qualitative Research Methods, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (September 12 and 14, 2017). **Data Visualization & Exploration**. Two-part guest lecture and activity at undergraduate Statistical Science course on Data Science, Durham, NC.

- Zoss, Angela M. (February 2, 2016). **Introduction to Data Visualization**. Guest lecture at undergraduate course on Environment and Conflict, Durham, NC.

- Zoss, Angela M. (October 4, 2016). **Introduction to Data Visualization**. Guest lecture at undergraduate course on Environment and Conflict, Durham, NC.

- Zoss, Angela M. (February 11, 2016). **Data Visualization 2: Designing and Reworking**. Guest lecture and activity at undergraduate Math course called Math Everywhere, Durham, NC.

- Zoss, Angela M. (September 28 and October 3, 2016). **Introduction to Tableau**. Two-part guest lecture at graduate Environment course on Sustainable Systems, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (September 13 and 15, 2016). **Data Visualization & Exploration**. Two-part guest lecture and activity at undergraduate Statistical Science course on Data Science, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (September 26 and 28, 2016). **Data Visualization & Exploration**. Two-part guest lecture and activity at graduate Statistical Science course on Programming for Statistical Science, Durham, NC.

- Zoss, Angela M. (April 1, 2015). **Basic Data Visualization**. Guest lecture at undergraduate Economics course on Social Inequalities/Low-wage Work, Durham, NC.

- Zoss, Angela M. (November 3, 2015). **Data Visualization and Scientific Presentations**. Guest lecture at Doctoral Seminar in Nursing Science, Durham, NC.

- Zoss, Angela M. (October 19, 2015). **Data Visualization Tips and Tools**. Guest lecture at Bass Connections course on Effects of Shale Gas Development, Durham, NC.

- Zoss, Angela M. (April 16, 2015). **How to Lie with Data Visualizations**. Guest lecture at undergraduate Math course called Math Everywhere, Durham, NC.

- Zoss, Angela M. (October 2, 2015). **Information Visualization and Tableau**. Guest lecture at graduate course on Historical and Cultural Visualization, Durham, NC.

- Zoss, Angela M. (February 24, 2015). **Introduction to Tableau Public**. Guest lecture at graduate Environment course on Sustainable Systems, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (September 21, 2015). **Practical Data Visualization**. Guest lecture at Bass Connections course on North Carolina in the Global Economy: The Workforce Development Challenge, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (September 29, 2015). **Practical Data Visualization**. Guest lecture at Bass Connections course called Energy Data Analytics Lab, Durham, NC.

- Zoss, Angela M. (February 23, 2015). **Tools for Data Visualization**. Guest lecture at Bass Connections course on The University as a Laboratory for Smart Grid Data Analytics, Durham, NC.

- Zoss, Angela M. (March 18, 2015). **Practical Data Visualization**. Guest lecture and visualization contest at undergraduate Computer Science course called Everything Data, Durham, NC.

- Zoss, Angela M. (September 22 and 24, 2015). **Introduction to Tableau**. Two-part guest lecture at graduate Environment course on Sustainable Systems, Durham, NC.

- Zoss, Angela M. (January 31, 2014). **Comparison in Visualization**. Guest lecture at undergraduate course on Data Visualization, Durham, NC.

- Zoss, Angela M. (October 29, 2014). **Data Visualization for Energy and Peacebuilding**. Guest lecture at Bass Connections course on Exploring the Intersection of Energy and Peace-building through Film, Durham, NC.

- Zoss, Angela M. (January 21, 2014). **Data Visualization Tips for Cartographers**. Guest lecture at graduate course on applications of GIS to conservation and land management, Durham, NC.

- Zoss, Angela M. (October 17, 2014). **Information Visualization and Relational Data**. Guest lecture at graduate course on Historical and Cultural Visualization, Durham, NC.

- Zoss, Angela M. (April 10, 2014). **Practical Data Visualization**. Guest lecture and visualization contest at undergraduate Computer Science course called Everything Data, Durham, NC.

- Zoss, Angela M. (April 3, 2013). **Data Visualization for Art Markets**. Guest lecture at Art History course on Art Markets, Durham, NC.

- Zoss, Angela M. (September 10, 2013). **Data Visualization for Awareness and Engagemen**. Guest lecture at undergraduate course on Environment and Conflict, Durham, NC.

- Zoss, Angela M. (October 31, 2013). **Data Visualization for Drought & Cross Border Crisis**. Guest lecture at First-Year FOCUS course on the refugee crisis, Durham, NC.

- Zoss, Angela M. (January 10, 2013). **Data Visualization for Historical Analyses**. Guest lecture at Seminar on history of Rome, Durham, NC.

- Zoss, Angela M. (March 1, 2013). **Data Visualization for Wikipedia Articles**. Guest lecture at Course on Wikipedia and Its Ancestors, Durham, NC.

- Zoss, Angela M. (October 28 and November 4, 2013). **Data Visualization for Stats 101**. Two-part guest lecture at Statistics 101, Durham, NC.

- Zoss, Angela M. (September 23, 2012). **Data Visualization for Refugee Camp Security**. Guest lecture at First-Year FOCUS course on Refugee Camp Security, Durham, NC.

Short-form Instruction Experience

- Zoss, Angela M. (January 26, 2021). **Overview of Cultural Competence in Computing (3C) Fellows Program**. Lightning talk at Duke University Libraries series – DivEing-In to the Racial Justice Roadmap, Durham, NC.

- Zoss, Angela M. (Fall 2017 to Spring 2021). **Visualization in R using ggplot2**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Spring 2019 to Spring 2021). **Presenting Data Science Results to Stakeholders**. Presentation at DataFest Workshop Series, Durham, NC.

- Zoss, Angela M. (February 8, 2019). **Communicating data through visualization**. Presentation at Duke Office of Audit, Risk and Compliance All-Staff Meeting, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (April 19, 2019). **Ethics and Visualization**. Presentation at Duke ASIST Responsible Conduct of Research Series, Durham, NC.

- Zoss, Angela M. (Fall 2019). **Advanced ggplot2 techniques**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (October 10, 2018). **Communicating data through visualization**. Presentation at Duke Communicators, Durham, NC.

- Zoss, Angela M. and Herndon, Joel. (July 11, 2018). **Data lakes and canals: A case study for using data for planning and assessment**. Presentation at Duke University Libraries – First Wednesday Series, Durham, NC.

- Chapman, Joyce and Zoss, Angela M. (November 16, 2018). **Learning from students & faculty: 2018 user surveys**. Presentation at Duke University Library Advisory Board Fall 2018 Meeting, Durham, NC.

- Hirsh, Lauren and Zoss, Angela M. (April 11, 2018). **UX of data visualization**. Presentation at Duke Innovation Co-Lab Roots workshop series, Durham, NC.

- Zoss, Angela M. (Spring 2018). **Custom Interactive Diagrams in LucidChart**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (Fall 2013 to Spring 2018). **Designing Academic Figures and Posters**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (Spring 2017 to Fall 2018). **Ethics and Visualization**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Fall 2017 to Spring 2018). **Introduction to Effective Visualization**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Fall 2016 to Fall 2018). **Visualizing Qualitative Data**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Monson, Eric and Zoss, Angela M. (November 18, 2017). **Data Visualization**. Presentation at Duke University Library Advisory Board Fall 2017 Meeting, Durham, NC.

- Zoss, Angela M. (November 1, 2017). **Network Visualization Literacy**. Presentation at Indiana University Network Science Institute Open Science Forum, Bloomington, IN.

- Zoss, Angela M. (February 7, 2017). **Visual narratives: Storytelling with visuals for effective research presentations**. Presentation at Duke Global Challenge, Durham, NC.

- Zoss, Angela M. (Spring 2016 to Spring 2017). **Advanced Tableau (Data Structures)**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Fall 2016 to Fall 2017). **Data Visualization with Excel**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Fall 2012 to Spring 2017). **Introduction to Tableau Public**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (September 20, 2016). **Basic principles for effective data visualization**. Presentation at Duke Pratt School of Engineering – PhDPlus Series, Durham, NC.

- Zoss, Angela M. and Little, John. (Fall 2014 to Spring 2016). **Basic Data Cleaning and Analysis for Data Tables**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Spring 2016 to Fall 2016). **Making Data Visual**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (February 4, 2015). **'Places & Spaces: Mapping Science' at Duke**. Presentation at the Duke University Libraries First Wednesday Series, Durham, NC.

- Zoss, Angela M. (January 29, 2015). **'Places & Spaces: Mapping Science' at Duke**. Presentation at the Duke Media Arts + Sciences Rendezvous, Durham, NC.

- Zoss, Angela M. (January 23, 2015). **Maps of Science exhibit tour**. Presentation at the Duke Visualization Friday Forum, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (April 20, 2015). **Practical data visualization**. Presentation at Duke Science and Society's Faculty SciComm Fellows Program, Durham, NC.

- Zoss, Angela M. (February 11, 2015). **Text-based disease classification of medical literature**. Presentation at the Duke Center for Health Informatics Informatics Research Seminar Series, Durham, NC.

- Zoss, Angela M. (April 7, 2014). **Better PowerPoint Presentations**. Panel presentation at Duke Nicholas Institute, Durham, NC.

- Zoss, Angela M. (May 28, 2014). **Coauthorship and email networks as proxies for collaboration**. Presentation at the HASTAC NSF EAGER-sponsored event entitled Big (and messy) Data & Collaboration Workshop & Conference, Durham, NC.

- Zoss, Angela M. (April 20, 2014). **Practical data visualization**. Presentation at Duke Science and Society's Faculty SciComm Fellows Program, Durham, NC.

- Zoss, Angela M. (March 31, 2014). **Practical Data Visualization**. Presentation at undergraduate residential course, Durham, NC.

- Zoss, Angela M. (October 24, 2014). **Text-based disease classification of medical literature**. Presentation at the Duke Visualization Friday Forum, Durham, NC.

- Zoss, Angela M. (February 12, 2014). **Visualization for exploration, communication, and inspiration**. Presentation at the Duke Information Initiative at Duke (iiD) Data Seminar Series, Durham, NC.

- Zoss, Angela M. (Spring 2014). **Data Visualization on the Web (Advanced)**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Spring 2014 to Fall 2014). **Data Visualization on the Web (Introduction)**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (Fall 2012 to Spring 2014). **Introduction to Text Analysis**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. and Monson, Eric. (Spring 2014 to Fall 2014). **Using Gephi for Network Analysis and Visualization**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (August 21, 2014). **Creating clean, effective charts and graphs**. Workshop at MediaLab: A Research Translation Boot Camp, Durham, NC.

- Zoss, Angela M. (October 24, 2013). **Digital Humanities Data**. Panel presentation at the Duke Doing DH series, Durham, NC.

- Zoss, Angela M. (March 18, 2013). **Approaches to Teaching (Data Visualization) Tools**. Presentation at Duke Munch & Mull Digital Humanities weekly discussion group, Durham, NC.

- Zoss, Angela M. (September 6, 2013). **Visualization for teaching and research (A conference report)**. Presentation at the Duke Visualization Friday Forum, Durham, NC.

- Zoss, Angela M. (Spring 2013 to Fall 2013). **Top Ten Dos and Don'ts For Charts and Graphs**. Workshop at Duke University Libraries' Data and Visualization Services department workshop series, Durham, NC.

- Zoss, Angela M. (October 25, 2012). **High Level Text Analysis and Techniques**. Presentation at Duke University Libraries Text > Data seminar series, Durham, NC.

- Zoss, Angela M. (May 13, 2009). **Tagging Neural Network**. Presentation at Complex Adaptive Systems and Computational Intelligence Research Group, Bloomington, IN.

- Zoss, Angela M. (March 9, 2009). **TTURC research project**. Presentation at Cyberinfrastructure for Network Science Center, Bloomington, IN.

- Zoss, Angela M. (September 29, 2008). **arXiv.org**. Presentation at Cyberinfrastructure for Network Science Center, Bloomington, IN.

- Wei, Carolyn and Zoss, Angela M. (August 1, 2005). **Patterns of communication and information exchange in software development**. Presentation at Sandia National Laboratories, Student Internship Symposium 2005, Albuquerque, NM.