

EDUCATION

- University of Illinois at Chicago, PhD in Learning Sciences** 2016
 Specializations: Data Visualization and Geographic Information Systems, Informal Learning
 Geospatial Analysis and Visualization Certificate (College of Urban Planning)
 Dissertation: Connecting Visitors to Data: Exploring Tools for Mediating Learning Talk at an
 Interactive Museum Exhibit
- National-Louis University, Alternative Certification Program for Elementary Education** 2004
 Self-contained K-9 Certification
- Northwestern University, Bachelor of Science in Interdepartmental Studies in Communication** 2003
 Specialization: Theatre lighting design

SKILLS SUMMARY

- Research** Seven years of experience in study design, data collection and management, IRB documentation, participant recruitment, video and audio transcription, design research, mixed methods, open coding, and grounded theory
- Design** Design and development of graphical user interface, map display, and interaction for CoCensus museum exhibit; over 30 theatrical productions as lighting director, lighting designer, assistant lighting designer, or sound technician
- Software & Coding** Proficient in Adobe Illustrator CS5, Adobe InDesign CS5, ESRI ArcGIS 10, NVivo, Inqscribe, Wordpress, MaxQDA12; experience with Processing 2.0, HTML5, CSS, PHP, MySQL, SPSS, Adobe Photoshop CS5, SketchUp, D3, R, ATLAS.ti, Qualtrics
- Teaching** Classroom experience in K-8 elementary, after-school adult math class (English and Spanish), and Kaplan test prep LSAT, GMAT (math only), and ACT; led workplace training to prepare attorneys and paralegals for participation in domestic violence pro bono clinic and to introduce software to fellow graduate students, including NVivo, RefWorks, and Scrivener; developed and conducted training for museum explainers on research methods in informal environments

RESEARCH EXPERIENCE

- Designing Digital Rails to Foster Scientific Curiosity around Museum Collections** 2015 - present
Postdoctoral Researcher, Northwestern University & Field Museum of Natural History
- Develop innovative data collection methods for conducting *in situ* studies evaluating visitors' use of digital touchscreens installed in the Cyrus Tang Hall of China
 - Liaise with museum staff to ensure the needs of all stakeholders are being met
 - Manage and analyze collected data and prepare and present regular updates to team members
 - Supervise first-year PhD student in project activities
 - Collaborate with team members in design-based research activities
- CoCensus: Collaborative Exploration of U.S. Census Data** 2011 - 2015
Research Assistant, Learning Sciences Research Institute, University of Illinois at Chicago
- Worked with an interdisciplinary team of researchers to iteratively design and implement an interactive census data map exhibit at two museums
 - Managed data collection and analysis of over 400 participants in multiple ongoing *in situ* studies
 - Trained museum Explainers on facilitation strategies
 - Led project branding efforts including logo development, direction and editing of promotional video, and website management
 - Disseminated findings at international academic and professional conferences
- Creating and Disseminating Tools to Teach with Demographic Data Maps and Materials** 2009 - 2012
Research Assistant, Learning Sciences Research Institute, University of Illinois at Chicago
- Assisted in data collection and analysis for students and teachers' use of GIS data maps in classroom activities
 - Recruited UIC faculty for design teams and collaborated with team members to create lesson plans
 - Disseminated findings at international academic and professional conferences

SELECTED PUBLICATIONS

- Roberts, J., & Lyons, L.** (submitted for review). Bigger May Not Be Better: Impacts of Embodied Interaction and Distributed Control on Visitors' Learning Talk at an Interactive Data Museum Exhibit. Under review.
- Roberts, J., Hall, A., & Goldman, S.** (in press) Learning Sciences. In K. Peppler (Ed.), *SAGE Encyclopedia of Out of School Learning*.
- Roberts, J., Banerjee, A., Matcuk, M., McGee, S., Horn, M.** (2016). Uniting Big and Little Data to Understand Visitor Behavior. Poster presented at the annual meeting of the Visitor Studies Association, July 2016, Boston, MA.
- Roberts, J., Lyons, L., Cafaro, F., & Eydt, R.** (2015). Harnessing motion-sensing technologies to engage visitors with digital data. In Proceedings of the 19th annual Museums and the Web conference. Available online: <http://mw2015.museumsandtheweb.com/proposal/harnessing-motion-sensing-technologies-to-engage-visitors-with-digital-data/>
- Roberts, J., Lyons, L., Cafaro, F., & Eydt, R.** (2014, June). Interpreting data from within: Supporting human-data interaction in museum exhibits through perspective taking. In Proceedings of the 2014 Conference on Interaction Design and Children (pp. 7-16). ACM.
- Lyons, L., and **Roberts, J.** (2014). Scaffolding the collaborative interpretation of data in a museum exhibit. In Leilah Lyons (chair), *Synergistic Scaffolding of Technologically-enhanced STEM Learning in Informal Institutions*. Symposium conducted at the International Conference of the Learning Sciences.
- Roberts, J., Lyons, L., Radinsky, J.** (2013) Become one with the data: Technological support of shared exploration of data in informal settings. In Anne Knowles (Chair), *From Visualizing to Understanding Historical Change: Using GIS Tools on the Web, in Class, and in Museums*. Paper session conducted at the meeting of the Social Science History Association.
- Roberts, J., Cafaro, C., Kang, R., Vogt, K., Lyons, L., & Radinsky, J.** (2013). That's me and that's you: Museum visitors' perspective-taking around an embodied interaction data map display. In Proceedings of the 10th International Conference on Computer-Supported Collaborative Learning (pp. 343-344).
- Cafaro, F., Panella, A., Lyons, L., **Roberts, J., & Radinsky, J.** (2013, April). I see you there!: Developing identity-preserving embodied interaction for museum exhibits. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 1911-1920). ACM.
- Roberts, J., Lyons, L., Radinsky, J., Cafaro, F.** (2012). Connecting Visitors to Exhibits through Design: Exploring United States census data with CoCensus. In Proceedings of the 2012 International Conference of the Learning Sciences.
- Roberts, J., Radinsky, J., Lyons, L., Cafaro, F.** (2012, April) Co-Census: Designing an interactive museum space to prompt negotiated narratives of ethnicity, community, and identity. In Josh Radinsky (Chair), *Tools for Constructing Historical Narratives: Teaching African American and Latino Histories With GIS Census Maps*. Symposium conducted at the meeting of the American Educational Research Association.
- Lyons, L., Becker, D., & **Roberts, J. A.** (2010). Analyzing the affordances of mobile technologies for informal science learning. *Museums & Social Issues*, 5(1), 87-102.
- Melendez, J., **Roberts, J., Radinsky, J.** (2010, November). GIS census data browsers: Tools for constructing social and historical narratives. In A. Beveridge (Chair), *New Directions in Historical GIS(1): Substantive Findings and Web-Based Resources*. Paper session conducted at the meeting of the Social Science History Association.

DOCTORAL CONSORTIA & INVITED EVENTS

- Cyberlab IGNITE Research Challenge Invited Participant (2015). Hatfield Marine Science Center, Oregon State University. Newport, Oregon.
- Museums and the Web (MW 2015). Designing Exhibit Interactivity to Support Group Exploration of Digital Data. Graduate Student Colloquium. Chicago, Illinois.
- Tangible, Embedded, & Embodied Interactions (TEI 2015). Exploring Effects of Full-body Control in Perspective-based Learning in an Interactive Museum Data Display. Doctoral Consortium. Palo Alto, California.
- Computer-Supported Collaborative Learning (CSCL 2013). Designing an Interactive Exhibit for Exploring Complex Data in Informal Learning Environments. Doctoral Consortium. Madison, Wisconsin.

SERVICE

Reviewer: Tangible, Embedded, and Embodied Interaction (TEI); SIGCHI Conference on Human Factors in Computing Systems (CHI)

Instructional Workshops: Introduction to RefWorks (Learning Sciences Student Association - LSSA), NVivo (LSSA), Scrivener Demonstration (Learning Sciences Research Institute (LSRI) Brown Bag), Informal Research Training Course for Practitioners (New York Hall of Science Explainers)

Technology Demonstrations: Introduction to Museum Research (LSRI visiting high school students), CoCensus demo (NSF Assistant Director visit; UIC Board of Visitors)

Committee: Museums and the Web Local Committee (2015)

COMMUNITY INVOLVEMENT

Director of Student Relations and Outreach, Do the Write Thing Challenge Chicago, 2009-present

Secretary, Gardens of Ravenswood Condominium Association, 2010-2013

Young Alumni President, Northwestern University Alumni Club of Chicago, 2007-2009

ADDITIONAL EXPERIENCE

Editorial Assistant, Journal of the Learning Sciences

2012 - 2014

- Managed over 150 manuscripts annually from initial submission to final decision
- Corresponded with authors and editorial team about journal business
- Organized quarterly and annual reports and meetings for editorial team

Litigation Paralegal, Latham & Watkins, LLP

2006 - 2009

- Organized, indexed, and maintained files of case-related correspondence and court filings
- Prepared documents for depositions and court filings
- Managed logistics of pro bono domestic violence clinic, including developing training presentations and resource materials for attorneys and paralegals, compiling reports for mayor's office and press release, and supervising paralegals and project assistants on site at domestic violence courthouse

Elementary Teacher, Chicago Public Schools

2003 - 2006

- Constructed curriculum for 4th, 7th, and 8th grade self-contained classes using primary and secondary sources
- Adapted lesson plans to reach varying levels in split 7th and 8th grade classroom
- Maintained highest standardized test scores, highest attendance rates, highest uniform policy compliance, and lowest suspension rates in upper grade classrooms