Master's Paper Abstracts
Summer 2017 - Spring 2018

Summer 2017

Lauren E. Bellard. Academic Librarians' Perceptions of Visual Literacy Standards. A Master's Paper for the M.S. in L.S degree. August, 2017. 38 pages. Advisor: J.J. Bauer
Visual Literacy is an area of study that has spawned varied theoretical writing, definitions, practical applications, and interdisciplinary insights over the past few decades in American education. In 2011 the Association of College & Research Libraries presented its Visual Literacy Competency Standards for Higher Education. The standards identify skills that students in the 21st century need to access, interpret, evaluate, and create meaningful images. This study interrogates if and how competency standards are used amongst academic librarians who work in art libraries, with data visualization, or who simply incorporate some aspect of visual literacy into their instruction sessions or research consultations. Conclusions are drawn from interviews with seven local academic librarians, and the author identifies major trends, as well as areas of disagreement, in visual literacy and is standardization in higher education.

Alexandra E Dowrey. Processing to Protect Privacy and Promote Access: A Study of Archival Processing in Medical Archives, Health Sciences Collections, and History of Medicine Collections. A Master's Paper for the M.S. in L.S degree. July, 2017. 70 pages. Advisor: Denise Anthony
This research reports on the findings of a study of archival processing in medical center archives, health sciences collections, and history of medicine collections. This exploratory study examined how archivists in these settings process collections and, in so doing, how they balance the potentially conflicting needs of protecting privacy and providing timely access. Four practicing archivists were interviewed, the interviews were transcribed, and data were coded inductively. Participants addressed how they identified sensitive information scattered throughout collections, the impact this sensitive information had on processing decisions, how they communicated access restrictions, and ways in which they managed access. The findings suggest that sensitive information is best protected when it becomes a shared commitment and a shared responsibility between all groups involved.

Kathryn E. Flynn. Locating the Research Methods of Doctoral Students: The Results of Interviews with Current Religious Studies Doctoral Students. A Master's Paper for the M.S. in L.S. degree. July, 2017. 71 pages. Advisor: Sandra Hughes-Hassell
This paper describes a study conducted to better understand both the ways in which current PhD students in religious studies gather research and which library resources they are using. PhD students provide invaluable insight regarding shifts in research, library science, and publishing, yet little research has been conducted with them in comparison to their more senior faculty-status colleagues. In order to correct that oversight, this study was designed in an effort to improve PhD students' instruction in the art of research and to improve library assistance with PhD student-specific research bottlenecks. This study used a semi-structured interview protocol to solicit the experiences of current religious studies doctoral students on the issue, seeking five, and garnering seven usable responses. Interview results indicate that in comparison to current religious studies faculty at the same institution, doctoral students are 1.) more comfortable identifying their work as data; 2.) incorporating more technology into their research methods and storage; and 3.) weighing in more heavily on the importance of public engagement. They do, however, still disagree amongst themselves on such issues as when to incorporate nontraditional publishing avenues into their portfolios. The results of this study are of primary interest to UNC University Libraries staff, academic library staff members in general through professional organizations, humanities faculty across the country, researchers studying trends in higher education, and by other PhD students.

Cole R. Gibson. An Assessment of the Usage of Content Standards in the Creation of MARC Record for Derivative Materials. A Master's Paper for the M.S. in L.S degree. July, 2017. 48 pages. Advisor: Caroline Keizer
Cataloging derivative materials is a complex and time-consuming process. Derivative materials often contains multiple entities who are responsible in some way for their creation and those entities are often not credited properly. With the introduction and use of RDA, and the growing awareness of FRBR standards these issues are becoming increasingly important. This research examines how MARC records are being created for these derivative materials and how they address the concepts of a work, expression, manifestation, and item as well as investigating the ways in which catalogers attempt to give proper attribution.

Karen Mélody Holland. Overture and Beginners Please! A Call for Performing Arts Metadata at the Edinburgh Festival Fringe. A Master's Paper for the M.S. in L.S. degree. July, 2017. 101 pages. Advisor: Denise Anthony
In August 1947, Scotland hosted its first Edinburgh International Festival of Music and Drama. Unbeknownst, it simultaneously hosted an uninvited set of eight theatre troupes, whose performances included a staging of Macbeth, alongside Marionette puppet plays. These undeterred artists set into motion what would become the single largest celebration of arts and culture in the world: the Edinburgh Festival Fringe. The year 2017 is the Festival's 70th Anniversary. Yet, little attention has been paid to its documentation and description. The literature suggests that metadata schemas dedicated to performing arts are recent, and none have been explored in the context of the Fringe. This research project conducts a case study of an archival collection entitled Follow the Fringe. It employs qualitative content analysis to explore how well the current metadata schemas modeled for performing arts address the descriptive needs of the Edinburgh Festival Fringe.

Janet Peterson. Looking for America: Keyword Searches for Diversity and Minorities in Children's Materials in North Carolina Public Library OPACs Using Vernacular and Library of Congress Subject Heading Terms. A Master's paper for the M.S. in L.S. degree. July, 2017. 159 pages. Advisor: Stephanie W. Haas
According to U.S. Census Bureau data, by 2015 over half of all children in the United States under the age of 5 were racial or ethnic minorities. Changing racial and ethnic demographics, in addition to changing social attitudes about other diverse groups, have led to changes in popular terminology and a call for children's books reflecting current diversity. However, Library of Congress Subject Headings may not reflect more current terminology, and public library OPACs may return different numbers of hits for vernacular and LCSH terms. This study examines the number of hits returned for children's materials in ten North Carolina public library OPACs for selected vernacular and LCSH terms for racial, ethnic, and other diverse minorities. Differences in numbers of hits returned may suggest that OPAC users receive irrelevant results, or that users do not receive all relevant results for existing materials in library collections.

Julie Riegel. From National to Local: Usability Testing Non-Profit Websites. A Master's Paper for the M.S. in L.S. degree. July, 2017. 49 Pages. Advisor: Mary Grace Flaherty
As people continue to access more information through the World Wide Web, providing effective websites has become increasingly important to the work of Non-Profit Organizations (NPOs). While the needs of individual NPOs will differ, working within industry standards helps build a bridge between NPOs and users regardless of familiarity with the organization's website. Feedback from users is critical to improving the way a site functions.

Though the process of retrieving information on the local affiliations of the larger organizations appears straightforward, this study supports the hypothesis that the user's journey is actually more complicated. In order to assess how users engage with each website, the researcher designed a sequence of usability tests that asked the users to find a specific piece of information on the local chapter for the following organizations: Girl Scouts of America, Youthbuild (a trade skill educator), and the American Civil Liberties Union (ACLU). The researcher recruited 15 participants using a convenience method, and the participants conducted a 4-part usability test. They were introduced to the study, performed 2 tasks, and then the researcher interviewed the participants at the end of the test.

This study found that participants experienced painpoints while using the websites to perform the task. These included trouble with finding information on the local branch of national NPO websites, frequent requests for contact information, frequent requests for monetary donations, and trouble navigating map visualizations.

Winter 2017

Brittany P. Burchett. What Makes a Book "Dirty"?: Defining "Sexually Explicit" Content in Books Banned for Teens. A Master's Paper for the M.S. in L.S degree. November, 2017. 86 pages. Advisor: Sandra Hughes-Hassell
According to data collected by the American Library Association, the #1 reported reason a book is banned or challenged is for "sexually explicit" content. The majority of these books were challenged due to concerns about teenager readers. The ALA provides no definition on this term which could guide librarians in selecting content and responding to these challenges. The goal of this paper was to create a definition of the "sexually explicit" challenge. This was done through a qualitative content analysis of the sexual content in fifteen books that received this complaint between the years of 2015 and 2015. A single definition could not be created from the varied results. However, eleven overarching themes relating to sexual content emerged. These themes provide guidance as to what librarians can expect to find in a book that receives this challenge.

Rashnil Chaturvedi. Interactive Temporal Feature Construction: A User-Driven Approach to Predictive Model Development. A Master's Paper for the M.S. in IS degree.

October, 2017. 54 pages. Advisor: Dr. David Gotz
Predictive modeling with visualization techniques can revolutionize the way businesses operate. Analyzing large datasets on high compute machines makes it possible to utilize advance technologies to support data-driven decision making. A wide range of domains deal with data that have random sequence of events (such as real-time verification or health care). Temporal relationship between these events can be highly predictive in nature. However, existing methods of feature selection makes it difficult to identify temporal relationships to enhance the predictive power of models. Often, it requires domain expert's knowledge to identify realistic patterns. Interactive Temporal Feature Construction (ITFC), a visual analytics workflow is designed to enable effective data-driven temporal feature construction. This application provides a new interactive workflow for model building and refinement, and visual representations to support that workflow. Use cases demonstrate how ITFC can result in more accurate predictive models when applied to complex cohorts of electronic health data.

Michael C. Conway. Policy Domains: A State-Machine Based Approach to Policy-Based Data Management. A Master's Paper for the M.S. in I.S degree. November, 2017. 72 pages. Advisor: Arcot Rajasekar and Reagan Moore
A Policy Domain is a concept introduced by Ward, Xu, Conway, et al. It describes a bridge between the low-level model of a Policy Enforcement Point in iRODS and a high-level representation of an event where policies may be applied. This proposal describes a project to concretely define and implement a policy domain as applied to a portion of the OAIS Reference Model, showing the properties of a policy domain, and pointing towards a general mechanism for creating well defined policy sets, metadata, and constraints appropriate for a domain. This provides a flexible and powerful enhancement to the successful policy management approach of iRODS, and points to new methods of composing policymanaged systems.

Jesse D. Griffin, Jr. Deselection Criteria Used by Academic Law Librarian in Selected Academic Law Libraries in the Southeastern United States. A Master's Paper for the M.S. in L.S degree. November, 2017. 42 pages. Advisor: Ronald Bergquist
Academic law librarians are dealing with three large crises. First, they have little budget money to use to build new library buildings. Second, they have little room to add new books to their collections. Third, the shelving space they do have is being reclaimed for group or collaborative study spaces.

This study investigates one response to these crises: a vigorous deselection program. While much literature for deselection in libraries in general, few academic resources deal with deselection in academic law libraries. To determine what criteria might guide academic law librarians in evaluating which books to retain, the research interviewed academic law librarians to discover what they thought were important deselection criteria to consider.

Silpa Reddy Guda. Information Resources Used by International Graduate Students at UNC to Acclimate to the American University Academic Life and Culture. A Master's Paper for the M.S. in I.S degree. December, 2017. 44 pages. Advisor: Cliff Missen
The number of international students enrolled in American universities is growing by the year and has been the case for many years now. Even with the availability of numerous resources that help the students in their adjustment, the process is by no means challenge free. This research hopes to identify perceptions and uses of the resources at UNC by international graduate students and discover strategies to better meet their needs while attending American universities. The responses helped identify the information resources found most useful by international graduate students. The research also demonstrated the challenges in using some of these resources and what can be done to potentially improve them.

Janice E. Hansen. Rare Books as Collections: Description Standards for Collections of Books that are Archival in Nature at the University of North Carolina at Chapel Hill and Duke University. A Master's Paper for the M.S. in L.S degree. November, 2017. 51 pages. Advisor: Eileen Dewitya
This paper looks at current and legacy cataloging practices for collections of rare books with archival elements at Duke University and the University of North Carolina at Chapel Hill. It considers three types of "archival" rare book collections: 1) the personal libraries of writers; 2) personal (research) collections; and 3) large collections of related materials. In considering eight representative collections from two institutions, it answers the following question: How do past and current description practices for "archival" rare book collections in two ARL libraries in North Carolina compare to the way recent scholarship has proposed these types of collections be described? This paper develops a clear picture of how these types of rare book collections are made visible at these two institutions.

Huan Lian. Identifying User Suggestions from Mobile App Reviews. A Master's Paper for the M.S. in I.S. degree. November, 2017. 34 pages. Advisor: Jaime Arguello
The last few years have seen enormous growth in the use of mobile devices. This growth has fueled the development of software applications, often called apps. Mobile app developers

constantly collect and analyze feedback in user reviews with the goal of improving their apps and better meeting user expectations. Due to high volume of data, manually reading user comments requires a labor-intensive effort. In this paper, we propose a framework for automatically identifying user suggestions from reviews, the information of which can be useful for next app release. Our approach uses a deep learning model with attention mechanism. Experimental results demonstrate that the proposed architecture outperforms the baseline methods.

Fannie H Ouyang. Using Cookbooks from the North Carolina Collection as Cultural Historical Documents. A Master's Paper for the M.S. in L.S. degree. December, 2017. 47 pages. Advisor: Denise Anthony

Cookbooks do not have to function merely as objects in the kitchen space. They are versatile, primary resources that can provide researchers with a range of insight into social, economic, and cultural histories. Through the careful examination of the books, a researcher can parse an array of characteristics to produce a narrative about the people who created and used the cookbooks and the times in which they lived. This master's paper describes such an analysis of thirty cookbooks published between 1872 and 1979 and housed in the University of North Carolina – Chapel Hill's North Carolina Collection. Here we found that the cookbooks from the Piedmont region of North Carolina presented an assortment of information that tells of the types of foods that were being eaten over the course of a century according to availability and food ideologies, the transforming roles of men and women, and ultimately, the transforming cookbook.

Mara C. West. A Review of Subject Indexing and Social Tagging Projects in Art Museums. A Master's Paper for the M.S. in L.S. degree. November, 2017. 42 pages. Advisor: Ryan Shaw.

Studies show that art historians and other image professionals value being able to search for images using subject terms. However, the subject indexing of artworks and images is a subjective and timeconsuming undertaking. As a result, many digital image collections are lacking comprehensive subject access points at the object level. Social tagging of digital images has been proposed as a means of improving image metadata and increasing subject access to art images. Three social tagging projects, Steve.museum, the Brooklyn Museum Posse, and Art UK's Your Paintings Tagger, were created as test programs to explore issues regarding the social tagging of digital images in museum collections. Their results suggest that carefully designed tagging programs can improve access to art images when used as a supplement to professional indexing.

Spring 2018

Amanda Baker. Exploring How to Evaluate The "Textbookiness" of a Textbook According to Librarians. A Masters paper for the M.S. in I.S. degree. May 2018. 64 pages. Advisor: Cliff Missen

This paper aims to discover what librarians thought about Open Access Textbooks: namely what criteria they felt was pertinent to help users make an informed decision about their resource. Affordability and access to education materials is ideal in a world which aims to provide certain human rights, i.e. education. Prior to this research, no research existed pertaining to librarian's opinions about essential metadata. Thus, librarians were shown a rubric and asked to evaluate each criterion ranging from title information to user friendliness on the web. It was discovered, that much of this information was valuable in determining which criteria were most useful to a user.

Todd E. Bowser. Information Literacy Without Walls: Toward a Collaborative Model for Transitional Library Instruction. A Master's Paper for the M.S. in L.S. degree. April, 2018. 43 pages. Advisor: Claudia Gollop

This paper explores the inconsistency in preparation of first-year university students for college-level research and coursework. A survey of first-year students in North Carolina was executed to measure the availability and impact of library instruction, seeking ways that academic librarians might intervene to address gaps in student information literacy experienced by college-bound students. Librarians across the state were interviewed to explore known information needs among these students and ways that university librarians could contribute to solutions. Survey data and responses from interview subjects suggest a need to improve support for information literacy skills as students prepare for post-secondary learning. Further research is needed to develop a collaborative model involving academic librarians, faculty, and school media coordinators to define and develop the skills needed by students in their college coursework and lifelong learning.

Bogeum Choi. The relationship between task complexity, working memory and information search. A Master's Paper for the M.S. in I.S. degree. April, 2018. 59 pages. Advisor: Robert Capra

In recent years, there has been growing interest in better understanding human actors in human information seeking behavior studies. Although a number of studies have been conducted to

explore users' individual differences in search behavior, there have been few studies taking both a theoretical and empirical approach to the relationship between users' cognitive ability, task complexity and search interactions. The study presented in this paper evaluated the effect of task complexity and working memory in human information searching behavior. Twenty-four participants from a non-college-bound adolescents sample (ages 18-50+) performed two search tasks of varying levels of complexity and were administered measures of working memory. ANOVA tests revealed three important trends: (1) task complexity had a significant main effect on users' perceptions about the task (i.e., temporal demand and level of satisfaction with time spent on the task), (2) working memory capacity had a significant main effect on users' search behavior (i.e., queries, clicks, time until 1st click and time between search activities), and (3) a significant interaction effect was found for several search interaction measures (i.e., queries, clicks and time between search activities) and perceived level of temporal demand. Specifically, participants with high working memory capacity carried out more search activities at a faster pace and experienced less temporal workload. Taken together, these results suggest that task complexity and working memory capacity can have effects on users' search behavior as well as their perceptions about the search experience.

Ellen F Cline. Undergraduate Perceptions of the UNC Libraries. A Master's Paper for the M.S. in L.S. degree. April, 2018. 67 pages. Advisor: Chad Haefele
Following the understanding that perception affects use, this research paper contributes to library assessment literature and investigates patron perceptions of libraries. Since undergraduates make up a majority of the UNC student body, the focus of this paper is on them and their levels of library engagement. A survey of undergraduates was conducted to better understand their perceptions of the UNC libraries and how those perceptions affect library use. The survey found that many students use the library as a place for studying and view it as both a building and as a community. Implications for library practice are examined, and it was found that the libraries could work to improve study areas in the library and improve outreach.

James N. Curry III. Promotional Support: A Content Analysis of Diverse Teen Representation in Public Library Promotional Materials. A Master's paper for the M.S. in L.S. degree. April, 2018. 34 pages. Advisor: Casey Rawson
This study describes a quantitative content analysis of promotional materials found in five sampled branches of an urban library system. The content analysis was conducted to determine if elements of diverse teen populations were represented in the promotional materials distributed and on display in the library branches.

Materials analyzed included brochures, business cards, flyers, posters, signs, and other advertising techniques such as displays. The materials included illustrations of race/ethnicity, gender, sexual orientation, religion, disability, and socioeconomic status. Each sampled branch presented different numbers and types of resources. Sampled community branches offered more variety of promotional resources than the larger, central library branches. A need for a more uniform distribution of promotional materials throughout the library system as well as templates for materials created by individual branches is justified. Suggested practices for future marketing of services to diverse teens are included.

Brianna J Davis. "The Library Has Been There": Public Library Response in Times of Community Social Crisis. A Master's Paper for the M.S. in L.S. degree. April, 2018. 47 Pages. Advisor: Sandra HughesHassell
This paper describes a series of case studies of public libraries during times of community social crisis. The responses of libraries were compared to historical examples of library responses to times of war and natural disasters, in order to determine how similar these responses were to other types of disaster response.

Three cases were examined: the Ferguson Municipal Public Library in 2014, the Baltimore Enoch Pratt Free Library in 2015, and the Charlottesville Jefferson Madison Regional Library in 2017. Reports of the library's actions and of the community's response were collected from contemporaneous and retrospective news reports, interviews, and social media postings. These libraries seemed to exhibit several of the same patterns of behavior exhibited by libraries during times of war or after natural disasters. The closer the library response mimicked that of a library during war or natural disaster, the more positive the community response seemed to be.

Xie Dong. Assessing the Relationships between Task demand, Task difficulty and Performance during Physicians' Interaction with EHR systems. A Master's Paper for the M.S. in I.S. degree. April, 2018. 32 pages. Advisor: Lukasz Mazur
The study's aim was to relate task demand, task difficulty with performance during physicians' interaction with electronic health records (EHR) system. The results indicated that there was a significant effect of task demands on task difficulty and performance; task difficulty was also related to performance. Practically, the results suggest that EHR designers might be able to positively affect physicians' performance by enhancing usability of interfaces aimed at directing physician' EHR-related interaction strategies.

Moira C. Downey. A New Who's Who: Using URIs in a Linked Data Approach to Name Authority Control. A Master's Paper for the M.S. in I.S. degree. April, 2018. 52 pages. Advisor: Wanda Gunther

The names of persons, families, and corporate bodies pose a particularly thorny problem for catalogers and other metadata specialists because they are simultaneously one of the most salient and most mutable pieces of metadata identifying a digital object. Despite continuing advances in distributed, webbased name authority control, this important work remains largely neglected by institutional repositories (IRs) in their efforts to archive the research outputs of their institution. This study aims to explore the possibilities surrounding name authority control in an IR context. Particularly, the study seeks to determine whether a linked data (or linked data-like) approach—in which Uniform Resource Identifiers (URIs) rather than name strings are stored for the authors of repository objects—is a feasible one for the Duke Digital Repository, and if specific steps can be outlined to provide a recommendation for implementing any such approach.

Brenna M Edwards. Theatre Archives in the Triangle: The American Theatre Archive Project in North Carolina. A Master's Paper for the M.S. in L.S. degree. April, 2018. 50 pages. Advisor: Thomas Nixon

This study describes a questionnaire survey and interviews with representatives from local theatre companies in the Triangle area (Raleigh, Durham, Chapel Hill) of North Carolina regarding the American Theatre Archive Project. The survey and interviews were conducted to determine how widely known the American Theatre Archive Project is known in the Triangle, and the impact, if any, it has had on the local theatre scene.

A survey and three semi-structured interviews were used to gather information. Of the 30 theatres contacted, a total of six responded overall. The survey showed local theatres have archives, but they do not have the funding or staff to maintain them consistently. The interviews confirmed this, while also exploring the intersection between archives and theatre. A sense of community and responsibility to preserve theatres' histories appeared throughout these interviews. Archives can help connect audiences with history, they just need a little help getting started.

Jennifer Embree. Archives by Any Other Name: Archiving Memory During Times of Conflict Through Non-Traditional Methods—A Case Study on Digital Humanities Projects Manar al-Athar & Project Syria. A Master's paper for the M.S. in L.S. degree. April, 2018. 51 pages. Advisor: Ryan Shaw

Over the last century, conflicts across the world have resulted in an unprecedented number of cultural heritage sites being purposefully targeted for destruction. While there have been several historical attempts to combat this destruction, the emerging field of digital humanities is now using new digital technologies to also document and preserve cultural heritage demolishment. This article conducts case studies of two such projects: Project Syria, a virtual reality experience documenting the Syrian Civil War, and Manar al-Athar, a digital photo archive that collects pictures of cultural heritage sites in the Middle East. This exploratory study seeks to compare past methods of preservation and documentation of cultural heritage during times of conflict to current methods of preservation and documentation through digital humanities projects, and to determine what digital humanities projects can accomplish that more traditional methods of preservation cannot.

Xueli Fan. Track Co-occurrence Analysis of Users' Music Listening History. A Master's Paper for the M.S. in I.S. degree. April, 2018. 40 pages. Advisor: Ryan B. Shaw

Music services provide listeners access to great numbers of available tracks. It is time consuming for listeners to find potential favorite ones. Music listeners increasingly want playlists to be created automatically. This study examines the relationship between background knowledge about music and track co-occurrence frequency in users' music listening history and builds a multiple linear regression model to predict the track cooccurrence. So given a seed track, the model can find out which track is most likely to co-occur. A simple objective evaluation compares predicted track with tracks in the users' listening history. 13 out of 15 test tracks find the highest rank predicted track in the same listening history.

Jenny Feng. Real-Time Event Summarization of Esports Events Through Twitter Streams. A Master's paper for the M.S. in I.S. degree. April, 2018. 50 pages. Advisor: Jaime Arguello

Exploration of real-time summarization (RTS) methodologies and applications to esports events on Twitter. The goal of this study is to evaluate the effectiveness of real-time summarization techniques at esports event detection, highlight summarization, and timeline generation. A two-step system of event-prediction and summarization is proposed. First, using Twitter as the data source, events in an esports game are predicted through machine-learning and classification to determine event occurrences. Four major classification features and five standard classification models (Naive Bayes, Logistic Regression, Decision Trees, K-Nearest Neighbors, Support Vector Machines) are evaluated to identify an optimal event-detection model. Second, natural-language text processing functions such as term-frequency and

TF.IDF are evaluated for effective event summarization and to confirm successful event-detection. The CART (classification and regression tree) model is selected as the most optimal model for event-detection, predicting in-game esports events with 70% accuracy. This study demonstrates the application of Twitter as a data source in detecting real time esports events.

Erin F. Fernandes. Under the Guidance of Other Lights: Art, Subjects, and the Conflict of the Ideal Versus the Reality. A Master's Paper for the M.S. in L.S. degree. April, 2018. 73 pages. Advisor: Gwen Gosney Erickson
Since 2010, the Getty Research Institute has developed the CONA project, which strives to be an authoritative resource on art objects and their metadata. ARTstor, a premiere collection of digital visual materials for hundreds of art-related institutions, strives to contribute its massive collection of architectural metadata to CONA. CONA, however, has specific, structured standards for metadata, while ARTstor has only few requirements. This study analyzed 428 architectural works in ARTstor to find the number of objects that had subject headings, and whether they adhered to CONA's standards. While almost all objects had information that could be applied to Subject, less than ¼ of the sample had subject headings. Even less were compliant with CONA's requirements. Several of the collections that lacked subject headings, including one of the Getty's, belong to institutions that pioneer metadata standards, which leads to the discussion of the value of subject headings and metadata standards.

Carson N. Fish. Hidden Places, Hidden Faces: Information-Seeking and Identity-Building Behaviors of LGBTQ-identifying Americans in Russia. A Master's Paper for the M.S. in L.S. degree. April, 2018. 37 pages. Advisor: Amelia Gibson
In the literature about Russian LGBTQ communities, an examination of how LGBTQ-identifying foreigners — particularly Americans — navigate the unique relationship between Russia and the LGBTQ community is missing. The goal of this qualitative study was to better understand how this population made planned for their time in Russia, found LGBTQ-friendly spaces, and made decisions about "coming out." The participants in this study used their general knowledge in Slavic studies — rather than directed, active information-seeking to form assumptions and plans about how they would present and "come out" in Russia. Many times, this meant they planned to remain "in the closet"; however, sometimes — through cultural clues — they could make an educated guess about whether or not coming out to a particular person would be a threat to their physical safety. Finally, participants who made interpersonal connections reported a higher success rate with finding LGBT-friendly spaces, such as gay bars.

Madison A Folks. Assessing Collection Silence: Access to Japanese Woodblock Prints at Twenty-Two American University Museums. A Master's Paper for the M.S. in I.S. degree. May, 2018. 62 pages. Advisor: Melanie Feinberg
This descriptive study returned to the 22 participant institutions of the ASIANetwork / Luce Asian Art Consultancy program (2005–2008) to question the narrative of Japanese woodblock prints through the organization and accessibility of their collections. As this study was concerned with implicit ontologies and not officially articulated meanings, all data was collected through content analysis of the manifest content of digital object records and collection organization Following the analysis of 22 collections and 30 individual records, this study found that the narrative remains silent for 12 of the 22 institutions – their collections had no digital presence. For the other 10 institutions, existing records were riddled with inconsistent, incorrect, and westocentrically-framed information. Though the scope of this project was narrow, this study can provide a model for questioning constructions of value, cultural exclusion, and the unintended narratives that unfold through the organization and accessibility of art collections.

Tabitha Frahm. A Usability Study of Virtual Reality Systems: On Best Practices for User-Centered Design in Virtual Reality Gaming Interfaces. A Master's paper for the M.S. in I.S. degree. April, 2018. 106 pages. Advisor: Chad M. Haefele
In an effort to gather a list of best practices for user-centered design in virtual reality gaming interfaces, this study combines evidence from industry anecdotal observations, heuristic evaluations, and usability testing with three of the leading virtual reality platforms on the market: HTC Vive, Oculus Rift, and Windows Mixed Reality. Quantitative and qualitative data were collected from a variety of usability scales and questionnaires, think-aloud tasks, observation, and semi-structured interviews. The results of the study suggest that immersion is an effective design feature across all interfaces, however the lack of real-world awareness resulting from immersion can be a major usability concern. Pain-points included controller design and button mapping, physiological comfort, and adapting to new methods of movement and interaction required in 3D virtual environments. The findings emphasize the need to prioritize learnability in the design of VR systems. The paper concludes with fifteen guidelines for designing user-friendly virtual reality interfaces.

Jeremy S Frye. Federal Scholarly Publishing: An Investigation into Practice and Public Access A Master's Paper for the M.S. in L.S. degree. April, 2018. 47 pages. Advisor:

Bradley M Hemminger
In the world of scholarly publishing ideals of open access have developed and thrived in a variety of fields and settings. There has been a wide variety of research published on the benefits and nature of open access, but this research has often overlooked the overlap between scholarly publishing and federal research. Federally authored works are considered works of government and considered in the public domain, but oftentimes the scholarly works of federal authors are copyrighted by private publishers and remain behind paywalls. The number of these works of government that exist behind private paywalls has not been documented and there is little research into the topic. This paper examines this phenomenon through citations gathered across major databases as well as through interviews with copy editors who work with these federally authored papers.

Erin P Gallagher. Prioritization of Information: An Archives Website Content Analysis and Interviews to Model the Prioritization of Online Content Availability. A Master's Paper for the M.S. in I.S. degree. April, 2018. 55 pages. Advisor: Helen Tibbo
This study describes a content analysis of the consistency of information available on university archives and special collections websites of the institutions in the University of North Carolina system. Additionally, interviews were conducted with archivists at these universities to understand obstacles they face when posting content online. From the results a prioritized information model for university archives and special collections websites was developed.

Amanda Girelli. Music Information Literacy Curriculum: a Content Analysis. A Master's paper for the M.S. in L.S. degree. April, 2018. 38 pages. Advisor: Sandra Hughes-Hassell
This study describes a content analysis of materials used to teach library and information literacy skills to undergraduate music students. The analysis was conducted to determine if and how music librarians who design and implement this instruction are informed by the Music Library Association's publication, MLA Information Literacy Instructional Objectives for Undergraduate Music Students. This document is based on the Association of College and Research Libraries' Information Literacy Competency Standards for Higher Education. Seven documents from two institutions were included in this study, and their content was compared to the Objectives – both the original text of the Standards and the MLA's musicspecific additions. The documents varied in format – some were intended for use by instructors, others were for students. The amount of clearly displayed

influence by the music-specific content in the Objectives varied greatly. This research indicates that there is little standardization or regularity in the Objectives' influence.

Julia Holubec Gootzeit. "The Zine Scheme": A Comparison of Five Institutions' Methods of Zine Description and an Assessment of the xZINECOREx Metadata Schema for the Creation of a Zine Union Catalog. A Master's Paper for the M.S. in L.S. degree. April, 2018. 67 pages. Advisor: Melanie Feinberg
This paper examines the schemas used to describe zines across the collections of five different institutions: the Queer Zine Archive Project (QZAP), Barnard Zine Library, the Bingham Zine Collections, Long Beach Public Library's zine collection, and Salford Zine Library, and compares them to the xZINECOREx metadata schema which was created in order to facilitate a union catalog of zines. Records were selected from each institution, and each schema was mapped to the xZINECOREx metadata schema. The selected records, schemas, and crosswalk were then analyzed.

Overall, xZINECOREx has the potential to facilitate the creation of a union catalog and allow institutions to share the work they have already done describing their zine collections. Difficulties in mapping the schemas from each institution to xZINECOREx came primarily from attributes mapping to multiple xZINECOREx attributes, and from xZINECOREx failing to have attributes that described a series of zines under one record.

Kelsey N. Hammer. Case Study: GIF-making as A Microcosm for Connected Learning for University Students. A Master's Paper for the M.S. in L.S. degree. April, 2018. 100 pages. Advisor: Casey Rawson
This case study examines a library design competition, "GIFABLE UNC", at the University of North Carolina at Chapel Hill during Fall 2017. Students were challenged to create GIFs, a developing social media, to capture UNC culture. This case study details and investigates the competition's success as an example of Connected Learning pedagogy for students. Connected Learning is a multifaceted pedagogical framework that encourages and supports building capacity and community for students through various frames including purposeful, productive, and interested-based learning and work. This case study found that "GIFABLE UNC" succeeded on some fronts, particularly value for students, but that further research and experimentation is required for this type of event to fully inhabit Connected Learning design criteria and features of new media.

Katie H. Harrell. A Content Analysis of Governmental and Private Enterprise Website Privacy Policies.
A Master's Paper for the M.S. in L.S. degree. April, 2018. 60 pages. Advisor: Amelia Gibson

This paper explores the differences between privacy policies on governmental and private enterprise websites. Three industries, healthcare, financial, and political, were selected for comparison. The six policies that were analyzed include regulations.gov, Facebook, healthcare.gov, Blue Cross Blue Shield, The U.S. Office of Personnel Management and Fidelity Investments. These sites were chosen because users may share similar information when interacting with site services.

The content analysis was performed to determine if there were significant differences in policy content and coverage. Although there were no obvious differences when policies were examined at a surface level, a close reading revealed that policy coverage and content was not the same. The policies were further analyzed to show how they discuss cookies, the ways in which a user could opt out of data collection, information sharing with third parties, and the often blurred lines between involuntary and voluntary information collection present. The results of the analysis revealed that governmental websites often have policies that provide more detailed and comprehensive information about user choice and policy coverage.

Christopher C. Haydock. Challenges in Preserving Video Games. A Master's Paper for the M.S. in L.S. degree. April, 2018. 38 pages. Advisor: Christopher Lee

Video games are challenging objects to preserve for a variety of reasons, but their value is increasingly becoming apparent to cultural heritage institutions. This study describes interviews conducted with digital preservationists at Carnegie Mellon University, the Computer History Museum, the Library of Congress, Stanford University, and The Strong National Museum of Play to determine how they define meaningful preservation of video games and what they feel are the greatest challenges to achieving this level of preservation.

The obstacles the interviewees most frequently identified were laws that make it illegal to perform preservation activities without permission from copyright owners, difficulties obtaining this permission, and insufficient resources to preserve a vast amount of deteriorating media. The study concludes with interviewees' ideas for how to overcome these problems and calls for further research on how to make video game preservation successful and scalable.

Yongxing Jiang. Build a Web Database Platform to Analyze Health Status, Health-Related Quality of Life (HRQOL), and Health Economic Outcomes (HEO) of Cancer Patients and Their Caregivers. A Master's Paper for the M.S. in I.S. degree. April, 2018. 36 pages. Advisor: Fei Yu

The goal of this exploratory study is to build a web database platform to facilitate the analysis of the relationship between health status, HRQOL, and HEO in family caregivers and cancer patients. This paper describes the whole design process of the Web database, query and data visualization platform including (1) target users' requirement (scientific research Needs); (2) medical expenditure panel survey (MEPS) data cleaning and processing; (3) methods and technical details of developing web databases (server-side) and the front-end user interfaces. This web database platform will help researchers achieve efficient querying and visualization of big medical dataset.

Matthew W. Johnson. "Not playing that game": An Exploratory Study of Queer Men's Health Information Behavior on Location-Aware Dating and Sex-Seeking Mobile Applications. A Master's Paper for the M.S. in L.S degree. April, 2018. 114 pages. Advisor: Dr. Amelia Gibson

The present study seeks to determine how location-aware mobile dating and sex-seeking applications manipulate, complicate, contribute to or develop the landscape of the health information environment for queer men, specifically focusing on information around human immunodeficiency virus (HIV) and preexposure prophylaxis (PrEP). The study used purposive sampling to recruit 8 participants who are male, have sex with men, and use mobile phone applications that are marketed primarily to queer men (e.g. Grindr, Scruff, Jack'd). Within the sample of this study, health information sharing related to sexual health information needs, such as HIV status, PrEP usage, and current sexual health, seem to be normalized. Further, this information, which is easily accessible via categorical input fields on dating application profiles, is important for making decisions about interacting with individuals on applications.

Finally, negotiating sex with other individuals on dating or sex-seeking applications leads to discussions involving the exchange of health information.

Mary A. Kallem. The Domestic Clutter Practices of Artists. A Master's Paper for the M.S. in L.S. degree. April, 2018. 50 pages. Advisor: Brian Sturm

This study describes a series of interviews with artists regarding their organizational strategies for household clutter. The interviews were conducted to deepen an understanding of clutter's role within domestic taxonomies, situating clutter not as a failure of homemaking but as a residual category integral to an individual's sense of home. Five artists were interviewed about a self-selected area of clutter within their homes. Each participant

practiced within a unique medium; participants included a zinemaker, fiction author, DJ, sculptor, and a musician. All five participants discussed clutter as sites of active labor and categorical negotiation, places where multiple aspects of their identities comingled to form ecologies unique to their senses of self.

Amelea Kim. Overdue Fines in the Academic Library: Undergraduate Student and Staff Perceptions of Overdue Fines at the UNC Undergraduate Library. A Master's paper for the M.S. in L.S. degree. April, 2018. 61 pages. Advisor: Mary Grace Flaherty

In recent years, libraries have started to examine their fines policy more critically to see the effects on patrons, workflow, and staff, as well as to see how their policies can be changed, or in some cases, removed. This study looks at the overdue fines policy at the Undergraduate Library at the University of North Carolina at Chapel Hill, specifically analyzing how experiences with the fines policy among undergraduate students affects their use of the library, as well as how the experiences of staff members with fines affects their workflow. The results of the study show that while many students feel that fines are an effective means of incentivizing book return, the financial burden does play a role in producing a negative impression of the libraries and can dissuade some patrons from using its services.

Hyeeyoung Kim. Where Are We Again? A Content Analysis on Usability of Online Finding Aids. A Master's Paper for the M.S. in I.S. degree. April, 2018. 67 pages. Advisor: Denise Anthony

This study presents findings from a content analysis I conducted on the usability of 264 online finding aids from archival institutions. I developed a coding scheme consisting 6 categories and 31 checklist items based on recommendations from previous studies of online finding aid usability along with web usability literature. Despite repeated user feedback from usability studies, this study found that archival terminology still commonly appears in finding aids, but explanations for the terminology are rare. Most institutions implemented standard navigation elements to their finding aids, but the adoption of recommended navigation elements, such as persistent local navigation and you-are-here indicators, was low. A local search box or browser built-in search indication appeared on less than half of finding aids and the adoption of help and Web 2.0 features was low. All institutions formatted finding aid section headings, but stronger formatting could improve finding aid scanability. The study also found that the visual indications for a hierarchical collection structure appear in more than half of the finding aids, but indications for accessing online materials or requesting collection materials were rare.

Jessica Kincaid. Support for Digital Humanities Research in Academic Libraries: Case Studies in Special Collections. A Master's Paper for the M.S. in I.S. degree. April, 2018. 57 pages. Advisor: Ryan Shaw

With the emerging prominence of digital humanities scholarship, academic libraries are taking steps to reevaluate approaches to research services. This study explores the nature of digital humanities research within the academic library setting, emphasizing special collections. The role of academic libraries is in flux with respect to the larger digital research environment. Academic institutions have varying definitions of digital humanities and offer a wide range of services for patrons working in the field, often necessitating an ad hoc support model.

This study describes a questionnaire survey of academic special collections libraries nation-wide, and four semi-structured interviews with librarians in two public universities in North Carolina. Surveys and interviews were conducted to determine the types of research support requested by patrons related to digital humanities, and the various ways in which academic libraries accommodate those requests.

Aubrey A. Klein. Digital Curation for Audiovisual Materials: Two Case Studies of Non-Academic Repositories. A Master's Paper for the M.S. in L.S. degree. May, 2018. 49 pages. Advisor: Helen Tibbo

Few studies have examined the digital curation practices of audiovisual materials from the perspective of the digital object lifecycle. With a plethora of existing video content and more being produced at a steady rate, it is important that repositories have a plan for the long-term digital preservation of their video assets. Of particular interest is audiovisual preservation outside of academic repositories. In this case study, the digital curation strategies of two non-academic repositories handling digital video assets were analyzed in relation to the digital object lifecycle. Findings from these cases provide insight into real-world practice and suggest that digital preservation planning in these environments requires more attention.

Councill Leak. A Usability Study of the CarolinaGo Mobile Application. A Master's Paper for the M.S. in I.S. degree. April, 2018. 61 pages. Advisor: Stephanie W. Haas

We are taught that user feedback should be collected and utilized throughout the system's development lifecycle of any application, however, this is not always done in practice. This was the case for UNC's official mobile application CarolinaGo. As project manager of CarolinaGo, I am not aware of any previous such internal attempts to have users evaluate the application. I decided this would be an excellent opportunity to apply my knowledge

of usability studies with the goal of producing actionable recommendations for the improvement of the app. I recruited ten students as participants to complete this task-based think-aloud usability study which also included a System's Usability Scale questionnaire and a post-task interview. After analysis of their likes, dislikes, errors, frustrations, and suggestions I have come up with several recommendations that I think would greatly increase the usability and utility of the application.

Kahlee E Leingang. Documenting the Resistance: How Three Institutions Collected Material From the 2017 Women's March. A Master's Paper for the M.S. in L.S. degree. April, 2018. 33 pages. Advisor: Denise Anthonyahlee E Leingang

This study describes the collecting practices for materials from the 2017 Women's March at the University of North Carolina's Wilson Library, Emory University's Stuart Rose Library, and the Nashville Public Library. Interviews were conducted with staff at each institution to understand how the organizations collected materials and what takeaways they had from this experience. Each institution had a different method for collecting materials and documenting this movement. Archivists and other cultural heritage practitioners can learn how different institutions collected material in order to be better prepared to document social justice movements in the future.

Chengpeng Li. Developing Fitness Group Class Recommendations Web-Application for UNC Campus Recreation. A Master's Paper for the M.S. in I.S. degree. April, 2018. 36 pages. Advisor: Arcot Rajasekar

UNC Chapel-Hill has great amount of gym facility and fitness group class services which are free to all students. However, students do have trouble in choosing the most suitable fitness group class due to many options and lacking in knowledge. For example, students who are new to fitness aren't very familiar with it. They are lacking in information about what kind of activity the class is doing as well as the best suitable class for them. Some classes are targeted to Intermediate fitness enthusiasts and may not be suitable for beginners, while some classes are entry-level courses for beginners and experienced Fitness lovers may find them boring. So it is definitely helpful if the website has detailed description of the class info, including the teacher, targeted people and brief information about the activity. For certain students, they love some teacher who have their Unique teaching methods.

Lauren K. Li. Visualization of Physical Activity Patient-Generated Health Data for Clinical Care. A Master's Project for the M.S. in I.S. degree. April, 2018. 91 pages. Advisor: Mary Grace Flaherty

This project examined the gap between physical activity patient-generated health data (PGHD) that are currently collected, versus formats or derivatives of PGHD that healthcare personnel at an internal medicine clinic would find useful (e.g. higher-level summaries or visualizations). Participants from the clinic were observed and surveyed, and a visualization was designed and prototyped based on findings from this research. Afterwards, the visualization was assessed with a utility and usability evaluation. The observation revealed points at which healthcare personnel interact with patient physical activity (PA) information in their current workflow. The survey found that overall, the healthcare personnel were most interested in seeing exercise type, minutes of moderate-to-vigorous PA, and step count. They expressed interest in using the visualization for determining PA recommendations and baselines, and for overall summarization of PA. The evaluation showed that the visualization performed at a "fair" level, but some improvements can be made.

Mingxiang Li Yelp Catering Reviews Usefulness Prediction. A Master's Paper for the M.S. in I.S. degree. April, 2018. 41 pages. Advisor: Jaime Arguello

With the widespread of online businesses, evaluation of customers' feedback is important for the online recommender systems because online reviews have become one of the most important sources of information for modern consumers before purchasing goods or using services. Many recommender systems use user-generated 'usefulness votes' in order to prioritize reviews for users, but there is much room for improvement. In this work, we attempt to predict the the usefulness vote a user will give to the reviews listed in the restaurant category. Using all features, a binary stacked ensemble model achieved a high level of accuracy (0.83). Several feature groups yielded statistically significant improvements while the features related with content don't have great impact to the usefulness. The authors present the results of the study and discuss their significance for research and practice.

Chuting Liu. A Visual Analysis to Help College Freshmen's Career Choosing – via Aspects of Education Level and Salary. A Master's Paper for the M.S. in I.S. degree. April, 2018. 40 pages. Advisor: David Gotz

This study is mainly about constructing a visualization project to help college students have a clear and intuitive view of general circumstance of occupations, so that to help them with future career choosing hopefully. Firstly, the users' potential information needs are discussed and different kinds of personas are built, then comes the visualization. The visualization interface mainly contains three graphs showing information of general occupation types, education level and salary of different positions, followed by some brief verbal analysis of the data and then the evaluation

part, which is in the form of online survey. Data used in this project is mainly second-hand data accessed via official websites of government.

Xinyi Liu. Design and Development of a Web-based Platform to Manage Information Resources Security in Higher Education. A Master's Paper for the M.S. in I.S. degree. April, 2018. 54 pages. Advisor: Arcot Rajasekar

This paper describes the design and development of a web-based platform to assess, analyze, and manage information resources security in higher education. The paper studies the types of assets, threats, and vulnerabilities that are used and faced by higher education and how-to categorize them into different security levels. The platform manages information resources by creating and operating independent security projects. It takes the user's input of asset, threat, and vulnerability information of each project as attributes and saves the data to a back-end database, then follows risk assessment metrics to calculate and determine risk value and level. Additionally, the visualization module provides the user a cross-view of all existing security projects based on the type and number of the asset, threat, and vulnerability to further assess and analyze them based on visual analytics.

Yumeng Liu. A Natural Language Processing Approach to Analyzing Consultation Visits for Treatment Decision Making for Localized Prostate Cancer. A Master's Paper for the M.S. in I.S. degree. April, 2018. 36 pages. Advisor: Fei Yu

This quantitative study investigates the information seeking and giving behaviors of doctors, prostate cancer patients and their family members during consultation visits. The dataset was a transcript of audio-recordings of real-time treatment consultations collected from 171 consultation visits in a clinical trial. For text analysis purposes, a question mark in a transcript sentence was used to signal the information seeking behavior while a period was used to signal information giving behavior. Two counting methods were adopted to investigate the effect of a decision aid intervention that was created to facilitate the prostate cancer patient consultation. Data process, cleaning and analysis were performed by Python, which shows the decision aid intervention promoted the patient's information seeking and giving behavior during the consultations. Topic analysis of specific target population showed different communication styles from Caucasian and African America population. What's more, the results contribute to the decision aid for patients and training on communications in the clinical visits.

Kehan Luo. Machine Learning Approach for Genre Prediction on Spotify Top Ranking Songs. A Master's

Paper for the M.S. in I.S. degree. April, 2018. 37 pages. Advisor: David Gotz

This paper analyzed the audio features and genres of top ranking songs on Spotify from January to August in 2017. The dataset consists of daily top ranking songs, their audio features and genres. The data was collected from Kaggle.com, Spotify Web API, and Discogs AIPs. Analysis contains summary statistics, principal component analysis, and machine learning classifier implementation and evaluation. The principal component analysis converted nine audio features into three principal components and they are named as sound, words in lyrics, and rhythm according to the description of audio features they include. The machine learning method takes audio features and genres as input and predicts genres for songs in the test set based on their audio features. The classifier achieved 46.9% accuracy which is not as good as expected. Detailed procedures, results and analysis are provided.

Heather L McGowan. But Where Is That Tape?: The Effects of Processing and Arrangement of MixedMaterial Archival Collections on the Discoverability of Audiovisual Materials in Online Finding Aids. A Master's Paper for the M.S. in L.S. degree. April, 2018. 38 pages. Advisor: Denise Anthony

Academic archives and special collections are acquiring a growing number of collections that contained mixed-format, mixed-material, or mixed-media items. This paper seeks to understand both how and why academic archives are processing, arranging, and describing audiovisual materials within these mixed-materials collections. Through interviews with nine archivists at large, academic archives and an examination of both existing finding aids and processing manuals, this research examines the disparity between theory and practice of the processing of mixed-material collections and the subsequent discovery of the audiovisual material by users of online finding aids.

Jesse Moore. Product, Process, and Photographs: Archival Workflows and More Product Less Process (MPLP) in Large Film Photography Collections. A Master's Paper for the M.S. in L.S. degree. April, 2018. 78 pages. Advisor: Christopher A. Lee

This study explored the workflows used by institutions for processing large film photography collections. I conducted semi-structured interviews with professionals from seven cultural heritage institutions and created workflow maps to visualize the procedures that each institution followed when processing their collections. By creating these workflow maps, I intended to demonstrate the similarities and differences between the institutions' arrangement and description practices for

processing large film photography collections. I also asked participants questions to investigate whether Greene and Meissner's More Product Less Process recommendations influenced how their institutions processed large film photography collections. Although each of the participating institutions described some or all of their collections at the item level, many used aspects of minimal processing in their workflows.

Lauren E Murphree. Wrangling the Lone Arranger: The Management Practices of Solo Archivists. A Master's Paper for the M.S. in L.S. degree. April, 2018. 50 pages. Advisor: Denise Anthony.

This paper describes a research study focused on the management practices of solo archivists, known in SAA as the "Lone Arrangers." Following a literature review, a gap in information about solo archivists and their actual daily practices was identified. An initial survey was used to identify a pool of archivists to interview. The following interviews sought to discover how solo archivists, in their challenging positions, manage the day-to-day tasks and decisions required by their jobs. The findings showed that these archivists develop a strong intuition informed by priorities, flexibility, and personal boundaries which allows them to balance multiple duties every day.

Devon Murphy. The Information Worlds of Art Museum Curators and Registrars: an Institutional Ethnography of Practice in North Carolina Institutions. A Master's paper for the M.S. in I.S. degree. April, 2018. 97 pages. Advisor: Ryan Shaw.

This paper presents an institutional ethnography analysis of the information worlds of art museum curators and registrars to determine what information sources were used by art museum staff in specific work tasks. This study was conducted in four art museums in North Carolina; the Mint Museum in Charlotte, NC, the Ackland Art Museum in Chapel Hill, NC, the Nasher Art Museum in Durham, NC, and the Weatherspoon Art Museum in Greensboro, NC. Six curators and four registrars took part in the study, which consisted of interviews and information horizon maps. The results demonstrate a wide use of both digital and print sources used in work tasks, with an emphasis on utilizing document surrogates in lieu of the physical art object. However, difficulties in accessing information about art objects in other collections was widely reported, making planning exhibitions and conducting research more timeintensive. Further study into museum websites and catalogs is encouraged.

Hannah Noël. A Content Analysis of the Representation of Black Girls in Children's Picture Books. A Master's Paper for the M.S. in L.S. degree. April, 2018. 58 pages. Advisor:

Brian Sturm.

This study used qualitative content analysis to determine if there is a difference in the way that black girls were depicted in children's picture books in the 1990s compared to their portrayal in the genre now. This study sought to identify the consistent, overarching themes appearing in each book and to determine whether these themes promote a positive representation of this demographic. Seventeen children's picture books featuring black girls as protagonists were selected and analyzed in depth using studies examining the diversity of children's literature as a guide. This study found that the depiction of black girls in this medium has not evolved much over the past twenty years, though not for the worse; many of the most positive themes, promoting ideals such as empowerment, culture and heritage, and relying on one's family for love and support, were found more or less consistently throughout each book, regardless of publication date.

Jennifer O'Bryan. "Why Would She Want to Read About Such Horrible Things?": The Appeal of War as a Reading Interest for Girls. A Master's paper for the M.S. in L.S. degree. April, 2018. 52 pages. Advisor: Brian W. Sturm

Reading appeal research has historically identified war as a topic of reading interest that correlates strongly with gender. Boys are traditionally much more likely than girls to read books involving war, and many girls prefer to avoid the topic. At the same time, research has consistently found smaller but significant numbers of girls who choose to read in this subject area. Using qualitative analysis of indepth, semi-structured interviews, this study explored the appeal factors at play for five 11- and 12year-old children who identify as girls (four in whole, one in part) who enjoy reading about war.

Traditional reading appeal factors that were sought by these readers included action-packed storylines, an attention-grabbing writing style, fast or intensifying pacing, courageous characters, and a dramatic, suspenseful tone. Learning about historical events played an important role for readers of historical fiction, while fantasy fans were drawn to the presence of strong female characters working alongside males in an adventurous storyline. Gender issues pervaded the discussion, revealing feelings of powerlessness and inequality. Several participants reported benefits that aligned with outcomes associated with bibliotherapy as well as closer connections to men in their lives. The results of this study can support librarians in providing gender-transformative readers' advisory services and assist other researchers in understanding gender dynamics in the middle grade years.

Jaffa Panken. Tracking Seeds and Crawls for Archive-It Web Archives: A Search for Best Practices. A Master's

Paper for the M.S. in I.S. degree. April, 2018. 45 pages. Advisor: Helen Tibbo

As web archives grow larger, institutions using Archive-It must keep track of a growing number of seeds and crawls. Managing this data often requires outside tools to create records of quality assurance efforts, scoping guidelines, and records for future colleagues and researchers to contextualize the archived websites. In an exploratory study of tracking systems for web archives, over twenty web archivists responded to a Qualtrics survey about their tracking practices as well as the reasons behind those practices. The survey revealed that only half the participants currently track seeds and crawls outside of Archive-It. Those who do track often rely upon spreadsheets, particularly for quality assurance and designing scoping guidelines. After reviewing the affordances of spreadsheets in light of participants' stated priorities for tracking, the study suggests alternative practices for tracking seeds and crawls. This study is a crucial first step towards establishing best practices for documentation of web archives.

Claire C. Payne. Retrieval of LGBTQ+ Recreational Reading Material: A Comparative Study. A Master's Paper for the M.S. in I.S. degree. May, 2018. 103 pages. Advisor: Melanie Feinberg

Over the past few decades, a sizeable body of library and information science literature has pointed to the inadequacies of traditional cataloging and classification systems for describing material related to marginalized communities. At the same time, alternative metadata systems have proliferated in online environments and social tagging has become almost ubiquitous. Focused specifically on the retrieval of LGBTQ+-related recreational reading materials, this study used an online survey to assess the utility of traditional library systems in comparison with the utility of the user-moderated folksonomy employed in the Archive of Our Own (AO3) fanwork repository. Results indicated that respondents, who were generally comfortable in both the library and Archive environments, preferred using AO3 to access LGBTQ+ material and perceived the tagging system to be of greater value in search processes than typical subject access mechanisms. Several possible avenues for improving current systems emerge in the conclusion of the paper.

Katharine W. Ray. A Motivating Climate: An Exploratory Study of the DataRescue Movement. A Master's Paper for the M.S. in L.S. degree. May, 2018. 58 pages. Advisor: Christopher A. Lee.

This study explores motivations in the DataRescue movement of 2017 that led to the identification and archiving of at-risk federal environmental data in digital repositories. It describes interviews with three national DataRescue coordinators involved in Data Refuge and the Environmental Data and Governance

Initiative (EDGI) and analyses of their organizations' websites. Particularly, it looks at the impact of federal record-keeping laws on DataRescue and whether organizers considered the data's eventual users.

Motivations for these projects included determining the scope of at-risk federal environmental data, communicating and raising awareness of the risk, and creating a long-term plan for access to and preservation of data. Environmental data justice (EDJ) was a stated principle for the DataRescue movement, and organizers utilized storytelling to demonstrate environmental data's impact on people's lives. The existence of federal record-keeping laws impacted DataRescue events only insofar as participants saw the laws protecting data as inadequate.

Samuel S. Robinson. Hiding in Plain Sight: An Exploration of the Classification of LGBT Materials in Libraries and Bookstores. A Master's Paper for the M.S. in L.S. degree. April, 2018. 38 pages. Advisor: Melanie Feinberg

The goal of this study has been to analyze the classification of prominent, award winning books on LGBT topics, to see how these topics are being treated in libraries and bookstores today. These materials have, in the past, been placed in a variety of locations throughout the library, sometimes with unsavory connotations. This study, however, does more to show the limited reach of even the most acclaimed fiction and nonfiction LGBT titles in today's libraries and bookstores, with eleven books from the sample appearing in three or fewer institutions. Those books that were frequently held across all institutions visited were frequently organized alphabetically by author or topic, and very few of them were discoverable or browsable based upon their LGBT content.

Jenni L. Royce. Narrative and Collaborative World Building in Tabletop Role-Playing Games. A Master's Paper for the M.S. in L.S. degree. April, 2018. 45 pages. Advisor: Brian Sturm

This study examines the interaction between narrative and collaborative worldbuilding and premade, extensive rulesets in tabletop role-playing games. This study specifically looks at the game *Dungeons and Dragons* 5th edition and included interviews with six participants on how they balanced the collaborative narrative environment and expressing creativity while working within a system with extensive rules and guidelines for how the game functions.

While participants did acknowledge that the rules were important, the rules themselves function more as paratexts, or guidelines. They functioned to create a consistent, understandable environment within which to create a

narrative, but participants recognized that if these guidelines hamper the enjoyment or flow of the game and story they could be changed or ignored for the players' benefit. Furthermore, players were more likely to break the rules or allow others to do so if there was a creative and interesting narrative purpose, as it was important to allow all players to have agency and input in the narrative and to ensure that the story itself was enjoyable for all involved.

Lucy Saiheng. Usability Evaluation for 360 Video Using Head Mounted VR Display and A Mobile Phone VR Holder. A Master's Paper for the M.S. in I.S. degree. April, 2018. 54 pages. Advisor: Bradley M. Hemminger

This paper evaluated the usability of two VR displays (head mounted display and a mobile phone VR holder) by using six metrics: ease of use, engagement, emotion, comprehension, enjoyment, and comfortableness. The paper also evaluated different focusing techniques for 360 videos and provided a recommendation for future work. A total of 20 participants (10 participants for each subject) participated in this study, and all of the participants were recruited from University of North Carolina at Chapel Hill. The quantitative result was evaluated by the six metrics and the qualitative data from the interview responses were used to help interpret the results. The results showed there was no significant difference between two devices when it comes to watching 360 videos in general. However, there was significance in individual measurements like comprehension and enjoyment level, which were affected by tasks and devices.

Dena B Schulze. The Second Act of Analog Film: Promotion of Analog Film in the Digital Age. A Master's Paper for the M.S. in L.S. degree. April, 2018. 52 pages. Advisor: Denise Anthony

This study aims to discover if and how archivists promote their analog film collections through outreach events. The researcher also wanted to learn how archivists felt about analog film in the digital age. The study utilized a survey sent out through the Association of Moving Image Archivists email listserv; a post-survey was sent out to willing participants to help draw final conclusions. The survey showed that outreach activities are occurring, and analog film is still valuable to archivists but as many studies show, resources and challenges limit the amount that can be done. The study supported the tension between digital files and analog film, and future trends will determine if analog film continues to be promoted for future generations.

Jessica L. Serrao. The Archival Image Revisited: An Analysis of Archival Encounters Portrayed By Genealogy Television Programming. A Master's Paper for the M.S. in L.S degree. April, 2018. 87 pages. Advisor: Denise Anthony

This study explored how reality genealogy television programming portrayed archival encounters to public viewers during journeys of family discovery. It analyzed content from prime time shows *Who Do You Think You Are?* and *Finding Your Roots with Henry Louis Gates, Jr* to understand how portrayals of archives, archivists, archival materials and research aligned with traditional archival stereotypes and the professional archival image. The author expanded upon previous research on the archival image and stereotypes in media by analyzing contemporary programs popular among genealogists, one of the largest constituents of archives. The study found some stereotypes were upheld while others were absent, and others were ambiguously portrayed. The findings suggested that reality genealogy television programs failed to deliver a nuanced depiction of the archival profession. The author suggested that increased public outreach and collaboration could help improve the archival image and spread understanding of the role of archives in society.

Susan J. Smith. What I Talk About When I Talk About Data Management: An Exploration Into Data Management Practices By Health Sciences Researchers. A Master's Paper for the M.S. in I.S. degree. April 2018. 43 Pages. Advisor: Mary White

Grant funders are increasingly requiring documented data management plans that stipulate access to and preservation of research data. Few studies have researched the data management behavior of health sciences researchers since these requirements were implemented in the early 2010s. This paper explores data management behavior by researchers in health sciences setting. Through 11 interviews, researchers were asked about the processes and tools they use to share research data with teammates and with external researchers. They were also asked about any current practices that facilitate or result in long-term preservation of their data. The outcome of this study is that, while researchers are well versed in short-term management of their data throughout the lifetime of a research project, there is room to improve long-term preservation efforts. These findings may help inform information professionals about their outreach and approaches to facilitate data access and preservation that aligns with the requirements of research sponsors.

Alyssa A. Spoonts. Understanding Gaps in Special Collections Education Through a Content Analysis of Syllabi. A Master's Paper for the M.S. in L.S. degree. April 2018. 35 pages. Advisor: Elizabeth Ott

This study aims to understand the gaps in the education of future special collections professionals by examining syllabi for rare book and special collections librarianship courses. The history of library education will show that special collections coursework

has not historically held an important place in library school curricula. Today, however, courses in rare book and special collections librarianship are an essential means by which future special collections professionals develop the specialized skills needed for success in the profession. Using content analysis, this study compares syllabi for special collections librarianship courses at ALA-accredited library and information science programs with ACRL's *Guidelines: Competencies for Special Collections Professionals* to identify gaps and overlooked areas in library school curricula.

Samuel L Stokes. The Information Seeking Behavior of Successful Websleuths. A Master's Paper for the M.S. in I.S. degree. April, 2018. 56 pages. Advisor: Denise Anthony

Websleuths are private citizens who spend their spare time using publicly available information usually found online in pursuit of finding the identity of previously unidentified bodies (UIBs). Typically, they seek to find matches between UIB and missing persons profiles found at online databases administered by government agencies and interested groups. However, in many cases the data listed on these databases are missing or incorrect. For this study, I interviewed seven websleuths who have successfully identified UIBs. The purpose of this study is to examine the information seeking behavior of this previously unstudied group as well as to understand how they successfully navigate unreliable information systems for an important purpose. The study results indicate that these cases are solved through dogged persistence and unique heuristics developed as a result of years of experience.

Ju Shua Tan. Social Bot in Social Media: Detections and Impacts of Social Bot on Twitter Users. A Master's paper for the M.S. in I.S. degree. April, 2018. 107 pages. Advisor: Bradley M. Hemminger

A social bot is a computer algorithm that automatically produces content and interacts with humans on social media, trying to emulate and possibly alter their behavior. Social bots have inhabited social media platforms for the past few years. Although the initial intention of social bot might be benign, existence of social bot can also bring negative implication to society. For example, in the aftermath of Boston marathon bombing, a lot of tweets has been retweeted without people verifying its accuracy. Therefore, social bot might have the tendency to spread fake news and incite chaos in public. For example, after the Parkland, Florida school shooting, Russian propaganda bots are trying to seize on divisive issues online to sow discord in the United States.

This study describes a questionnaire survey of Twitter users about their Twitter usage, ways to detect social bots

on Twitter, sentiments towards social bots, as well as how the users protect themselves against harmful social bots. The survey also uses an experimental approach where participants upload a screenshot of a social bot. The result of the survey shows that Twitter bots bring more harms than benefits to Twitter users. However, the advancement of social bots has been so great that it has been hard for human to identify real Twitter users from fake Twitter users. That's why it is very important for the computing community to engage in finding advanced methods to automatically detect social bots, or to discriminate between humans and bots. Until that process can be fully automated, we need to continue educating more Twitter users about ways to protect themselves against harmful social bots.

Y Tang. Understanding Usage of Public Bike Sharing System: Citi Bike as an example. A Master's Paper for the M.S. in I.S. degree. April, 2018. 49 pages. Advisor: Arcot Rajasekar

In recent years, bike sharing systems ushered in the explosive growth. The growth of bike sharing systems brings both health benefits and environmental benefits. This study is a data analysis project that investigate the usage pattern of bike sharing system using Citi Bike open source data. This study studied the influence of weather and date on the bike usage, and compare the characteristic usage pattern of two different gender group. Based on that, this study provide a bike demand prediction and user gender prediction model. Also, with the comparison on usage of NY taxi, this study analysed when people prefer Citi Bike and verify that Citi Bike can be an ideal alternative transportation to taxi.

Lia Walberg. News Coverage of Government Email Scandals. A Master's Paper for the M.S. in I.S. degree. April, 2018. 70 pages. Advisor: Christopher A. Lee

In this paper, I ask what news coverage of scandals involving the emails of prominent politicians can tell us about why the American public considers these emails to be important. I performed a qualitative content analysis on news articles related to five specific cases to answer this question. I found that the most prominent reason across cases for why authors of these articles expressed interest in the controversies was that they helped to expose character flaws of prominent politicians. However, I also found that the individual circumstances of the cases played a significant role in the reasons for interest in those cases. Ultimately, I hope that a better understanding of the motivations behind these scandals can help records professionals to better manage the risk associated with the records in their care.

Tian Wang. Predictive Analysis on eSports Games – A Case

Study on League of Legends (LoL) eSports Tournaments. A Master's Paper for the M.S. in I.S. degree. April, 2018. 46 pages. Advisor: Arcot Rajasekar

This paper discusses about how different features influence League of Legends eSports game results. Logistic regression and decision trees are used as the main predictive analysis methods for making a prediction. In this study, three types of features: champion selection, in-game factors, and player performance, are tested to see how closely they are related to the game results. This paper also compares the similarity and difference between predictive analytics on traditional sports and eSports games, and discusses about potential approaches to improve eSports prediction accuracy in the future.

Beth Morris Weiss. Collaborative Educational Programs for Grades 6-12: A Study of Partnerships between Special Collection Librarians and Educators. A Master's Paper for the M.S. in L.S. degree. April 2018. 48 pages. Advisor: Denise Anthony

This paper considers how collaborative educational programs for using primary source materials are initiated and sustained between special collections librarians and school groups of young adults in grades 6-12. In particular, this study focused on on-going programs that met more than once where students used primary sources. Semi-structured interviews with three teachers, a school media specialist, a museum historian, a state librarian, and two public librarians were conducted to identify effective practices of four such collaborations conducted between 2009 and 2017: Brooklyn

Connections, the Bangor, Maine Life on a Tidal River online exhibits, a Daily Record transcription project in Wilmington, North Carolina, and the R.O.A.D. Project in Indianapolis, Indiana. Findings point to common factors for successful programs including accessible and interesting primary sources, providing students time for meaningful research, delivering help from experts, providing customized content, proficiency working with middle or high school students, and nurturing relationships for partnerships.

Qichen Yu. Apply Text Mining Analytics to Virtual Reference Services: A Case Study on the Email Q & A Service at an Academic Health Sciences Library. A Master's Paper for the M.S. in I.S. degree. May, 2018. 52 pages. Advisor: Fei Yu

Academic libraries receive and reply numerous of patrons' emails via their virtual reference service, such as Ask a Librarian. This paper presented a text mining approach to analyzing one-year email records accumulated from the Ask-a-Librarian service by the Health Science Library (HSL) at the University of North Carolina at Chapel Hill. This study will help HSL improve their

email service by revealing key topics from user questions and the characteristics of user information seeking behavior.

Yufei Zhang. Increasing the Transparency of Survey Re-Weighting Using Visualization. A Master's Paper for the M.S. in I.S. degree. April, 2018. 43 pages. Advisor: David Gotz

Surveys are widely used for a long time by collecting data from a sample and further making reasonable target population. However, generally, sample cannot fully represent target population. Thus, predictions made from surveys contain biases. To eliminating biases, subgroups inside sample can be reweighted to match target population. This paper introduces an interactive tool to visualize the reweighting process in surveys, especially in presidential polls. A detailed description of system's webbased user interface and algorithm are provided. In addition, results of user studies that evaluating the system with twenty users are presented and discussed.

Huan Zhao. Data Visualization and Analysis about Physicians' Payment Data. A Master's Paper for the M.S. in I.S. degree. Apr, 2018. 39 pages. Advisor: Arcot Rajasekar

In this paper, I analyze the relationship between the number of patients that have been identified with a specific type of disease and the physicians' total charge amount. I hold the assumption that the more states within a region that show statistical significance in the relationship, the more serious the disease in that region will be. But after doing a detailed analysis and visualization, I found the assumption to be invalid. However, I found the incidence rate for some of the diseases were related to geographical location. Therefore, I did a comprehensive research to find the reason for this relationship from different perspectives as well as provide some recommendations.

Wanchen Zhao. Visual Query System to Help Users Refine Queries from High-Dimensional Data: A Case Study. A Master's Paper for the M.S. in I.S. degree. April, 2018. 66 pages. Advisor: David Gotz.

Temporal queries are normally issued for cohort selection from the high-dimensional dataset in many contexts, such as medical related research areas. The idea was inspired by the difficulties when interacting with the i2b2 system, an NIH-funded National Center for Biomedical Computing based at Partners HealthCare System, which seldom provides informative feedbacks and interactive exploration about the clinical events of each query or the expecting follow-up cohort. Considering the complexity and time-consuming nature of complicated temporal queries, it would be frustrating when iterative query refining is needed. The paper presents a newly designed web-based visual

query system to facilitate refining the initial temporal query to select a satisfactory cohort for a given research. A detailed interface design associated with the query time frame and the implementation of the visual query algorithm that enables advanced arbitrary temporal query logic is included. In addition, a case study with 3 participants in medical related research areas was conducted that shows the system was overall useful to help the users to gain an idea about their follow-up queries.

Andi Zhou. Direct Answers or Brief Informative Suggestions? Performance of Different Types of Search Assistance Tools on Different Types of Search Tasks. A Master's Paper for the M.S. in I.S. degree. April, 2018. 36 pages. Advisor: Robert Capra

While search assistance tools can help users with their search in various ways, would they always be effective for every type of search task? This study explored the different performance between two kinds of search assistance tools on exploratory tasks and comparative tasks. A user study was conducted on an experimental web search interface with the search assistance widget displaying on the right-hand side. Each participant was asked to do exploratory and comparative tasks on each search assistance tool. We collected and analyzed data from participants' web logs, pre-test and post-task questionnaires, and the semi-structured interviews by the end of the study sessions. The findings suggest the effectiveness
of each type of search task is different between the two search assistance tools; the dimension assistance is more helpful in comparative tasks whereas the link-suggesting assistance is more favored by exploratory tasks.

Matthew S. Zimo. Considerations on Migrating to an Open Source Integrated Library System. A Master's Paper for the M.S. in I.S. degree. April, 2018. 50 pages. Advisor: Bradley Hemminger

There is a large amount of published case studies of school, public, and academic libraries migrating from proprietary to open source integrated library systems (ILS). This is an attempted case study of a special library's migration to an open source ILS. The most promising ILSs for US-based special libraries are Koha and OPALS.

Julia G. Zoltners. Moving Beyond "Schlocky": Interpersonal Relationships as Depicted in Star Reviewed Young Adult Novels. A Master's Paper for the M.S. in L.S. degree. March, 2018. 77 pages. Advisor: Brian Sturm

This study was conducted to identify important trends in the relationships that are depicted in young adult novels and to examine whether or not the observed relationships follow gendered patterns. A content analysis was conducted of 14 starred reviewed young adult novels, and findings were then compared to the trends observed in the psychological literature regarding adolescent relationships, to determine how closely the depictions within the novels map onto the established body of scholarly literature on adolescent relationships. Family and friend relationships were the most prominent within this study. Sibling relationships were found to have gendered patterns while parental and friend relationships did not. Romantic and sexual relationships in this sample were not as prevalent as the psychological literature suggested. Overall, the relationships described in the psychological literature closely map onto the relationships found in the sample suggesting that contemporary young adult novels depict realistic relationships for young adults.