

Establishing a Research Agenda for Computational Archival Science through Interdisciplinary Collaborations between Archivists and Technologists

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Abstract: Four University of Maryland iSchool graduate students (MLIS and Doctoral) with diverse backgrounds in IT, information policy, information management, history, and archives, worked in small interdisciplinary teams in the fall of 2019, collaborating for 8 weeks on exploring data-driven scholarship and investigating new archival science methodologies in order to contextualize datafied records from the Legacy of Slavery Project at the Maryland State Archives. They experimented with data wrangling, data visualization, spatial mapping, and networking of events and people represented in the records, to formulate a research agenda that explores the opportunities and challenges of using innovative technologies in the representation of race with considerations on digital erasure. Mentors included digital experts from The National Archives at Kew, U.K., King's College London, and the Maryland State Archives. This presentation documents the resulting conceptual and methodological challenges explored with a focus on the ethical implications that digital brings to our understanding of the record and the archival context, and suggests new ways for archives to become more accountable, collaborative and transparent.

About the authors:

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Rajesh Kumar Gnanasekaran is an IT Senior Engineer by Profession with 13+ years of experience in Application development, and is currently a Doctoral Student at the University of Maryland's Information School. His research interests include but not limited to discovering unique patterns or networks by using graph databases from born digital or digitized archived data, and the application of natural language processing on this data from an ethics and contextual perspective. He also has two Master's degrees in Information Management and Data Analytics.

Alexis Hill, MLIS

Alexis Hill is a native of Prince George's County, MD. She graduated from St. Mary's College of Maryland with a BA in Art/Art History in 2009. She currently works as an Archives Technician with the National Archives at College Park, Still Pictures Branch. Before, she was an Exhibits Information Technician with the National Archives Museum, Exhibits Division from January 2010 to November 2016. She then transferred to the National Archives at College Park, Research Room Operations as an Archives Technician in November of 2016 and was on staff there till April of 2020. She is currently studying for her Masters in Library and Information Science at the University of Maryland, College of Information Studies.

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Lori Perine has had a substantive Washington-based career as a STEM policy-maker, alliance executive, and entrepreneur focused on translating innovation to advance societal goals. She has served on a Presidential transition team, held key executive positions at the White House Office of Science and Technology Policy and in international technology alliances, and served on numerous intra- and intergovernmental councils and advisory groups for STEM and energy. Ms. Perine has been recognized as a pioneering role model and uses her visibility to advocate for progress of women and underrepresented minorities in STEM fields, inclusion of minority-serving institutions in research and education projects, and collaborations with universities in emerging economies. She recently transitioned into academia, to enhance opportunities for underrepresented students in data and information sciences. At the University of Maryland, she is engaged in research to investigate societal impacts of big data and explore related technical and ethical frameworks that address equity and advance the public good.

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Recipient of the distinguished Emmett Leahy Award for pioneering work in the field of records and information management. Founder of the Advanced Information Collaboratory (AI-C).