

History and Art History Search Committee
George Mason University
4400 University Dr.
Fairfax, VA, 22030

Dear Dr. Smith and Committee Members:

I write to apply for the position of Assistant Professor in the Department of History and Art History and Director of Public Projects at the Roy Rosenzweig Center for History and New Media. I received my Ph.D. in History from the University of Virginia in August 2013, with a dissertation entitled, "By the Numbers: Understanding the World in Early Modern England." I am currently the Digital Humanities Specialist at Carnegie Mellon University Libraries, with a courtesy appointment as Visiting Assistant Professor in the Department of History. I believe my collaborative grant work in the digital humanities, administrative experience, and scholarly interests make me a highly qualified candidate, well suited to the responsibilities of this position.

My personal research explores how early modern English men and women understood their world through the use of numbers. Though I draw on my previous studies in mathematics, my questions and sensibilities are those of a cultural historian. My book-in-progress analyzes the changing ways people encountered numbers and subsequently employed those numbers in their day-to-day lives. It also examines how ideas about quantification were deeply informed by religious concerns, particularly the belief that God used numbers to create the world.

As a historian of knowledge and its forms, I have explored a wide range of sources in both physical and digital archives. The majority are printed, with an emphasis on didactic literature such as arithmetic textbooks, as well as sermons and pamphlets that denounce or defend specific applications of numbers, such as censuses and the compilation of plague death statistics. My research on early modern arithmetical education was recently published in the *Journal of British Studies*, while my interest in plague death statistics motivates my current personal digital project, *Death by Numbers*. I am currently constructing a database of over 100 years' worth of London Bills of Mortality, which will be made publicly available online as a research product in its own right, as well as form the basis of my network analysis of the spread of plague throughout the city during both epidemic and endemic plague years.

As the Digital Humanities Specialist, my primary job responsibility is to advance digital humanities and digital scholarship at CMU and in Pittsburgh, more generally. In my first eighteen months in this position, I have co-founded and obtained internal CMU funding for a digital scholarship center (dSHARP). Since our launch, I have been managing team meetings and agendas, supervising our budget, and planning and running a variety of program events, including guest speakers, workshops, and socials. I am currently working to fulfill our promise of facilitating for-credit DH classes by teaching a graduate course in the Department of History; serving as a core faculty member for the Department of English's undergraduate Humanities Analytics minor; and liaising with the University of Pittsburgh faculty as they propose a Graduate Certificate in Digital Studies and Methods. I helped build a city-wide digital humanities community, through co-founding the umbrella organization PGH|DH, and we are currently planning to host the first conference of the Association for Computers and Humanities

in 2019. I have also served on several university committees aimed at increasing the University Libraries' capacity to support digital scholarship, as well as the grant committee of a \$2 million Andrew W. Mellon Foundation grant for digital humanities and technology-enhanced learning. In addition to my own digital projects, I advise on numerous faculty and student projects.

The largest grant-funded digital humanities project I have worked on to date is *Six Degrees of Francis Bacon*, which draws upon my dual background in history and mathematics. This project used natural language processing and statistical analysis of the *Oxford Dictionary of National Biography* to create a preliminary reconstruction of the social network of early modern Britain (circa 1500–1700). Our initial network consisted of over 13,000 people and 170,000 relationships, which serves as a foundation for the continuous addition of crowd-sourced information from our website, www.sixdegreesoffrancisbacon.com. Crowdsourcing is particularly vital to our project, as it enables us to gather additional information from a wide variety of digital and non-digital sources as well as incorporate the expert knowledge of academic researchers, librarians, and interested members of the public.

I am a co-Principal Investigator (co-PI) on *Six Degrees* and for two years I was also a CLIR-DLF Postdoctoral Fellow in Early Modern Data Curation, working full time on this project. My position included a wide range of administrative responsibilities, including co-writing and reporting on grants. I monitored the *Six Degrees* budget expenditure rate and have completely managed the budget for other grants and organizations. I directed and supervised multiple *Six Degrees* student programming teams and was personally active in the design, programming, and maintenance of the Ruby on Rails portions of our website. Additionally, I managed our website and community of crowdsourcers. As part of my project responsibilities, I coordinated with scholars across several academic departments, worked to obtain new source materials for analysis from international scholars and cultural institutions, organized and curated project data, managed project publicity, and produced scholarly communications. Additionally, I lead the development of teaching resources to enable the incorporation of *Six Degrees of Francis Bacon* into undergraduate and graduate syllabi, drawing upon my experiences teaching with both our website and other digital humanities projects in my own undergraduate courses.

We are currently in the process of wrapping up our NEH-ODH Implementation Grant for the project, which enabled us to redesign the website in collaboration with Density Design of the Politecnico di Milano. We have also planned for the medium-term preservation of the active crowdsourcing site through CMU Libraries, as well as the long-term preservation of our datasets through the Folger Shakespeare Library. Upon completion of the project, we will make our website code available under an open-source license so scholars interested in constructing networks for other cultures can replicate and build upon our work.

My concerns over the long-term preservation of *Six Degrees*, as well as other digital projects I have been involved in, motivated my Andrew W. Mellon-funded project *Digits*. I am a co-PI on this project with Matthew Burton and Matthew Lavin (University of Pittsburgh), and Scott Weingart (CMU). We are exploring the possibilities of container technology for the long-term preservation of digital scholarship, as well as their use to ease the peer-review and publication of digital scholarship. The first phase of this project will culminate with the CC-BY

publication of both our environmental scan and a blueprint for a fiscally and technologically viable container-based system, that can integrate digital scholarship into the publishing and preservation workflows of our existing scholarly ecosystem. While we intend to apply for additional funding from Mellon, to implement a prototype of this system, the blueprint will enable others to build upon our initial research if we lack the time or resources to do so ourselves. We are committed to releasing all code under an open source license.

I am excited by the possibility of joining George Mason University's Department of History and Art History, particularly given the Roy Rosenzweig Center for History and New Media's position as the premiere center for the study of digital history. Please let me know if you require further information.

Sincerely,
Jessica Otis