Chantal Brousseau

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EDUCATION

M.A. in History with specialization in Data Science Ottawa, ON
Carleton University, CGPA: 11.33/12.00 2021–2023

- Thesis: "Metadata in the Margins: Reshaping Archives as Data Through Early Modern Marginalia"
- Website: https://chantalmb.github.io/MRE-MitM-2023/

B.A. Hons. in History minor in Computer Science Ottawa, ON
Carleton University, CGPA: 11.33/12.00 2017–2021

PROFESSIONAL EXPERIENCE

Digital Humanities Research Support Ottawa, ON
MacOdrum Library February 2021–Present

- Primary focus working with Interdisciplinary Studies librarian Martha Attridge Bufton to develop a series of introductory workshops to the digital humanities and associated technical foundations for Carleton University's MacOdrum Library.
- Further helped advance other digital humanities initiatives within the library using knowledge of programming and related technology.
- Currently producing a Twine version of *Do We Take Shelter?*, a game-based learning activity on identifying reputable sources.

HOK Summer Intern (Room-by-Room/Heritage Team) Ottawa, ON
CENTRUS- HOK Architecture-Engineering Firm Summer 2019

- **Centre Block Rehabilitation Project**
- Gathered and recorded information on heritage and non-heritage assets being removed from the Centre Block.
- Entered aforementioned heritage assets into a database for long-term tracking.
- Wrote scripts to automate the comparison of data using Python.
- Utilized architectural models and floor plans to locate missing assets.
- Revised preliminary forms generated for heritage assets assessed on-site for correctness.

RESEARCH EXPERIENCE

Research Assistant Ottawa, ON
Carleton University January 2022–January 2023

- **International Space Station Archaeological Project (ISSAP)**
- 2023 Winner of Award For Outstanding Work In Digital Archaeology from Archaeological Institute of America
- Joint venture led by Dr. Justin Walsh (Chapman University – Orange, CA, USA) and Dr. Alice Gorman (Flinders University-Adelaide) to conduct first full-scale investigation of material culture of a human habitat in space focusing on the crew of the International Space Station.
- Created a bespoke application using Svelte for the annotation of images sent to the team of ISSAP researchers from the International Space Station.
- Providing ongoing support as needed.

Contract Researcher   Ottawa, ON
School of Public Policy and Administration at Carleton University   April 2022–October 2022

- **Government of Canada Contract Analysis**
- Working with Government of Ontario Early Researcher Award recipient Dr Amanda Clarke and Public-Servant-in-Residence Sean Boots on technology to aid their research analyzing Government of Canada procurement contracts.
- Cleaned data on procurement data and used it to train a BERT-based text classifier to identify and categorise contracts that lacked descriptive information.

Research Assistant   Ottawa, ON
Carleton University   September 2021–May 2023

- **The New Organigram Project: A Macroscopic View of the Illicit Antiquities Trade**
- Collaborative project led by digital archaeologists Dr Shawn Graham and Dr Donna Yates at Maastricht University.
- Developed ways to automate the generation of knowledge graphs from newspaper articles, auction catalogues, the Panama Papers, and other public sources to predict otherwise hidden relationships within the illicit antiquities trade.
- Research focused on Natural Languages Processing techniques for Relationship Extraction for the training of knowledge graph embedding models.

Undergraduate Research Fellow   Ottawa, ON
Carleton University   October 2019–April 2020

- **George Garth Graham Undergraduate Digital History Research Fellowship**
- Explored the history of urbanism in ancient Rome through the lens of city-building games
- Analyzed existing open-source, genre-related game projects to assess suitability for further modification.
- Published two brief posts regarding aspects of my research on X-Lab, a virtual cultural heritage informatics lab at Carleton University.

Teaching Experience

Contract Instructor   Ottawa, ON
MacOdrum Library   August 2022–Present

- Teaching workshops focused on the fundamentals of computer science and programming in Python for those interested in digital humanities.
- Students gain understanding of how to do basic programming themselves, but also learn how to work collaboratively with technical partners through understanding relevant vocabulary and being taught how to use popular tools such as Git.

Teaching Assistant   Ottawa, ON
Carleton University   September 2022–May 2023

- **HIST 2000A: Medieval Europe**
- Facilitated in-class activities, group discussions, and debates to encourage critical thinking and enhance understanding of historical content among students.
- Designed and led supplementary discussion topics to complement weekly lectures, promoting deeper engagement with course material.
- Managed the distribution of course materials such as lectures and assignments across digital platforms.
- Ensured the accessibility of course materials through methods such as adding captions to video materials.
- Collaborated with fellow TAs and course instructor through regular meetings to share insights and pedagogical approaches ensuring consistency and alignment in course content and assessment strategies.

Teaching Assistant   Ottawa, ON

Carleton University   September 2021–May 2022

- **HIST 1001A: The Making of Europe**
- Graded and provided constructive feedback on written assignments and examinations, aiding students in improving their research and writing skills.
- Assisted students in developing research topics, refining research methodologies, and structuring essays.
- Managed course-related administrative tasks, such as directing students to university resources, maintaining attendance records, organizing course materials, and ensuring the efficient functioning of digital platforms (e.g., Brightspace).

Student Partner   Ottawa, ON

Carleton University   September 2020–January 2021

- **Students As Partners Program**
- Collaborating with Dr. Shawn Graham in developing the Winter 2021 course HIST4916A: Digital History + Museums.
- Collecting, cleaning, and formatting sets of data from Ottawa GLAM (Galleries, Libraries, Archives, and Museums) institutions for students to use in creating a GLAM workbench.
- Building tutorials for applications such as Juypter Notebook and RStudio to aid students in gaining the technical skills needed for the course.
- Compiling relevant additional resources for students to utilize beyond the course content.
- Contributing to the creation of the course website.

Publications

[1] S. Graham, D. Yates, A. El-Roby, **C. Brousseau**, J. Ellens, and C. McDermott, "Relationship Prediction in a Knowledge Graph Embedding Model of the Illicit Antiquities Trade", en, *Advances in Archaeological Practice*, vol. 11, no. 2, pp. 126–138, May 2023, ISSN: 2326-3768. DOI: 10.1017/aap.2023.1. [Online]. Available: https://www.cambridge.org/core/journals/advances-in-archaeological-practice/article/relationship-prediction-in-a-knowledge-graph-embedding-model-of-the-illicit-antiquities-trade/9B802F4BEFEA325D3221E39BCE4F3A63 (visited on 09/04/2023).

[2] J. Walsh, A. Gorman, S. Graham, and **C. Brousseau**, "Archaeology in Outer Space: The Sampling Quadrangle Assemblages Research Experiment (SQuARE) on the International Space Station", en, Portland, OR, 2023. [Online]. Available: https://core.tdar.org/document/474962/archaeology-in-outer-space-the-sampling-quadrangle-assemblages-research-experiment-square-on-the-international-space-station.

[3] **C. Brousseau**, "Interrogating a National Narrative with GPT-2", en, *Programming Historian*, Oct. 2022. DOI: https://doi.org/10.46430/phen0104. [Online]. Available: https://programminghistorian.org/en/lessons/interrogating-national-narrative-gpt (visited on 09/04/2023).

Skills

- **Operating Systems:**   MacOS, Windows, Linux (Arch and Debian families)
- **Programming:**   Python, Javascript, R, SQL, BASIC
- **M. Learning:**   PyTorch, TensorFlow, Keras, OpenCV, scikit-learn
- **Web:**   HTML/CSS, Svelte, React, Express, Electron
- **Digital Publishing:**   LaTeX, Markdown, Jupyter Notebook, Jeykll, Hugo

- **Design:**   Adobe Suite, Inkscape, Balsamiq, InVision, Figma
- **Management & Collaboration:**   Git (GitHub, GitLab, GitKraken), Hootsuite, Bluebeam Revu

Scholarships and Awards

• Ontario Graduate Scholarship	2021–2023
• Department of History Scholarship	2021–2023
• CUASA (Carleton University Academic Staff Association) Scholarship Award	2021–2022
• Call for Papers for Computational Analysis Skills for Large-Scale Humanities Data, *Programming Historian in collaboration with The National Archives and Jisc.*	2021
• Digital Humanities Award for "Best Exploration of DH Failure/Limitations"	2020

Undergraduate

• Jocelyn Maynard Scholarship in History	2020–2021
• Faculty of Arts and Social Science Scholarship	2017–2021
• Dean's Honour List	2017–2020

Media

- **"Connecting the Digital Dots"**   June 8, 2023
  - By Alyssa Tremblay for the Faculty of Arts & Social Sciences
  - Link to article: https://carleton.ca/fass/story/connecting-the-digital-dots/

- **"Notes from an Extraterrestrial Archaeological Dig"**   Winter 2022
  - Published in the 2022 Special Print Edition of Popular Science magazine, "Exploring Space: Secrets of the Universe Revealed"
  - Written by Tatyana Woodall

- **"Preparing for Space Travel"**   January 28, 2022
  - By Nick Ward for Challenge What's Possible
  - Link to article: https://challenge.carleton.ca/preparing-space-travel/

- **"What an Extraterrestrial Archaeological Dig Could Tell Us About Space Culture"**   March 29, 2022
  - By Tatyana Woodall for PopSci+
  - Link to article: https://www.popsci.com/space/archaeology-international-space-station/

Volunteering & Mentoring

- **Communications Officer** at Carleton Computer Science Society   Fall/Winter 2020–2021
  - Maintaining the CCSS (Carleton Computer Science Society) social media accounts and replying to student inquiries.
  - Responsible for designing all social media content using Adobe Suite, Figma, and Canva.
  - Managing and moderating the CCSS virtual Discord community to ensure appropriate conduct and encourage inclusion and participation.

- **Administrator** at Carleton Computer Science Society   Fall/Winter 2019–2020
  - Managed the CCSS (Carleton Computer Science Society) social media and replied to inquiries across all platforms.
  - Created promotional materials for all events using the Adobe Suite and Canva.
  - Collaborated with other members on the Board of Directors in the organization and execution of events.

See full list of projects at: chantalbrousseau.xyz