

~ Alex Garnett

garnett@hey.com

<https://github.com/axfelix>

<http://webambler.com>

Work

Simon Fraser University, Digital Preservation and Data Curation Specialist; 2012–2016.

-> Research Data Management and Systems Librarian; 2016 – Present.

- Served as the lead analyst for, deployed, managed, supported users of, wrote policies around, and eventually migrated our research data repository platform.
- Implemented research data discovery and data encryption at a national scale in Canada through consultation with stakeholders across universities and in government.
- Designed command line, web, and desktop tools for supporting preservation workflows and contributed to best practices locally around digitization and retention of audiovisual media.
- Worked with research computing and HPC on scaling up architecture; handled infrastructure for university archives and provided guidance to researchers around hosted services.
- Migrated thesis holdings to PDF/A, validating documents, correcting encodings, and using ghostscript to automatically remove information which was improperly redacted.
- Liaised with external partners at Dataverse, eLife, OLH, CeON, and elsewhere on open source collaborations with the Public Knowledge Project and Open Journal Systems.
- Performed web archiving at various levels; creating WARCs, screen-scraping content.
- Imaged, migrated, and emulated legacy media from Macintosh and non-Macintosh disks.
- Taught and mentored students in data management and research software development.
- Supervised software developers and RAs; created and maintained project roadmaps.

SocialFlow, Data Scientist (PhD Intern); 2012.

- Performed social network analysis of real-time Twitter data for impact maximization.
- Wrote Hadoop queries and pitched media organizations.

Neuroethics Canada, Graduate Researcher; 2010–2012.

- Measured the impact of research; content analysis, network visualization, grant writing.

City of Vancouver Archives, Digital Project Archivist; 2011.

- Cleaned up and re-structured archival records database; refined user specifications.

NextWerk vTeams, Development Coordinator; 2009.

- Acted as the server technician and client liaison for a distributed web development team.

Education

University of British Columbia, MLIS; 2009–2010.

University of Connecticut, BA, Cognitive Science and Linguistics; 2006–2009.

Selected Publications and Presentations

Garnett, A., and Zhang, J. (2020). Lightweight Zero-Knowledge Encryption for Repository Deposit of Sensitive Data.

Stathis, K., and Garnett, A. (2020). Making a Harvester Harvestable: Federating an OAI endpoint directly from Postgres. *Access Conference*.

Garnett, A. (2020). Aesthetic Trends of Compression Artifacts. *We Miss iPres*.

Garnett, A., Wilson, L., Turp, C., and Pascoe, J. (2019). The Fast and the FRDR. *Open Repositories*. Hamburg, DE.

Qasim, U., Davis, C., Garnett, A., Marks, S., and Moosberger, M. (2018). Research Data Preservation in Canada: A White Paper. *Portage Network*. <http://hdl.handle.net/2429/67130>

Garnett, A., Winter., M., and Simpson, J. (2018). Checksums on Modern Filesystems, or: On the Virtuous Consumption of CPU Cycles. *The International Conference on Digital Preservation (iPres)*. Boston, MA. <http://www.sfu.ca/~garnett/ipres18.pdf>

Garnett, A. (2018). Relational Databases as Repository Objects. *Open Repositories*. Bozeman, MT.

Castro, E., Crosas, M., Garnett, A., Sheridan, K., and Altman, M. (2017). Evaluating and Promoting Open Data Practices in Open Access Journals. *Journal of Scholarly Publishing*. <https://dx.doi.org/10.3138/jsp.49.1.66>

Garnett, A. and Trann, T. (2017). The Canadian Federated Research Data Repository: A Modestly Large Collaboration. *Open Repositories*. Brisbane, AU.

Garnett, A., Aufreiter, M., Buchtala, O., and Alperin, J.A. (2017). Introducing Texture: An Open Source WYSIWYG Javascript Editor for JATS. *JATS Conference*. Bethesda, MD.

Trann, T. and Garnett, A. (2016). Building a Scalable National Repository Infrastructure for Canada. *CANHEIT*. Edmonton, AB.

Garnett, A. and De Meo, M. (2016). Using a GPU to Accelerate Digital Preservation Workflows. *Open Repositories*. Dublin, IE. <http://www.sfu.ca/~garnett/or16.pdf>

Garnett, A. and Graebner, C. (2015). Evaluating the Suitability and Sustainability of “Local Dropbox” Solutions to Complement a Research Data Repository. *Open Repositories*. Indianapolis, IN.

Garnett, A. (2015). OMERO: File-level preservation for natural scientists. *IASSIST*. Minneapolis, MN.

- Garnett, A., Alperin, J.A., and Willinsky, J. (2015). The PKP XML Service and meTypeset: a new Word-to-JATS solution. *JATS Conference*. Bethesda, MD.
- Castro, E., and Garnett, A. (2014). "Building a Bridge Between Journal Articles and Research Data: The PKP-Dataverse Integration." *The International Journal of Digital Curation*.
<https://dx.doi.org/10.2218/ijdc.v9i1.311>
- Bell, A., Garnett, A., Graebner, C., and Harder, G. (2013). Barn Raising in a Virtual World. *Coalition for Networked Information Fall Membership Meeting*. Washington, DC.
- Garnett, A., Lee, G., and Illes, J. (2013). "Publication Trends in Neuroimaging of Minimally Conscious States." *PeerJ*. <https://peerj.com/articles/155/>.
- Willinsky, J., Garnett, A., and Pan-Wong, A. (2012). "Refurbishing the Camelot of Scholarship: How To Improve the Digital Contribution of the PDF Research Article." *Journal of Electronic Publishing*.
- Siemens, R., Timney, M., Leitch, C., Koolen, C., and Garnett, A. (2012). "Toward Modeling The Social Edition: An Approach To Understanding The Electronic Scholarly Edition In The Context Of New And Emerging Social Media." *Literary and Linguistic Computing*.
- Garnett, A., Whitworth, E., and Fazzio, S. (2012). Doctor Who meets Doctor Zhivago: Modeling Serendipity on Extreme Divergence. *CSCW 2012 Workshop on Design, Influence, and Social Tech*.
- Nathan, L. and Garnett, A. (2011). Privacy Research & Real-World Design: Is there an Elephant in the Room? *CHI 2011 Workshop on Privacy for a Networked World*.
- Garnett, A., Whiteley, L., Piwowar, H., Rasmussen E., and Illes, J. (2011). "Neuroethics and fMRI: Mapping a Fledgling Relationship." *PLoS ONE*. <http://dx.plos.org/10.1371/journal.pone.0018537>
- Schneider, O. and Garnett, A. (2011). ConsentCanvas: Automatic Texturing for Improved Readability in End-User License Agreements. *Association for Computational Linguistics Conference*.

Teaching

- Introduction to Python Programming. taught several times annually since 2014, through the SFU Research Commons, Code4Lib BC, Software Carpentry, and the UBC Digital Humanities Salon series.
- Introduction to Shell Scripting. taught in 2015 through Code4Lib BC.
- Introduction to Text Parsing and Regular Expressions. taught in 2016 through SFU Library Research Bazaar.
- Introduction to Data Security. taught several times annually since 2017, through the SFU Research Commons, based on curricula developed from EFF materials by Jessica Gallinger.
- Research Data Management, UBC iSchool guest lecture.
- Information Technology and Archives, UBC iSchool guest lecture.

Working Groups

CARL Portage – FRDR Discovery Working Group -- Co-chair

CARL Portage – Preservation Expert Group

CARL Portage – Curation Expert Group

AtoM 3 Roadmap Committee

Access Conference 2020 Organizing Committee

Geodisy Project -- Consulting Member

Skills and Miscellanea

- Fullstack software development, preference for Python/SQLite, expertise in text parsing
- Facility with quickly prototyping web or desktop apps, primarily using Flask and Electron
- Hacking of deprecated interactive media for display or retention
- Dataset training, modeling and visualization using Tensorflow, R, and D3
- Database and server management and general dev ops provisioning (Docker, CI, bash, Nginx)
- Knowledge of, opinions about, querying and indexing of common metadata standards
- Service on hiring committees of junior and senior colleagues
- Participating in RFP processes guided by government privacy and purchasing requirements
- Experience with basic 3D modeling for printing
- Creating and maintaining documentation using static sites and video tutorials
- Podcast audio production (de-essing, leveling, music beds) and livestreaming
- BAA French language proficiency
- Certified in VisiCalc and Hypercard

Grants

Stanford MediaX Publish-on-Demand, 2012

SFU University Priorities Fund, 2019