Building Competencies Around Algorithmic Awareness

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Outline

Algorithm as Symptom
Grant Project
Opportunities
Future Direction
Google statement on how a 4chan thread identifying the wrong man as LV shooter showed up "in the news"

"Unfortunately, early this morning we were briefly surfacing an inaccurate 4chan website in our Search results for a small number of queries. Within hours, the 4chan story was algorithmically replaced by relevant results. This should not have appeared for any queries, and we'll continue to make algorithmic improvements to prevent this from happening in the future."
“The algorithm did it.”

- Google, Zuckerberg, et. al.
Algorithm as Symptom

A ghost, something unseen
Problem Statement

Our technological experiences are increasingly mediated by algorithms - the code and computational processes embedded into our software.
Problem Statement (cont.)

We, and our patrons, routinely engage in systems that predict, recommend, and speculate about our interests based on the digital fingerprint we provide with our link clicks and “likes”, but we all struggle understanding how and why those systems work as they do.
What if?

We could start to introduce new forms of literacy for our field

Algorithms weren’t the Ghost in the Machine
Inspiration

Safiya Noble

Critical Algorithms Studies
Algorithms of Oppression
How Search Engines Reinforce Racism

Safiya Umoja Noble

256 pages
57 b/w photos
February, 2018
ISBN: 9781479837243

https://safiyaunoble.com/
Critical Algorithm Studies

https://socialmediacollective.org/reading-lists/critical-algorithm-studies/
Librarian as Educator

New Forms of Digital Literacy
The Research

Institute of Museum and Library Services
Laura Bush 21st Century Librarian Program (LB21)
“RE:Search” - Unpacking the Algorithms That Shape Our UX

https://www.imls.gov/grants/awarded/re-72-17-0103-17
The Grant Project

1. A curriculum for a workshop and a semester-length course

2. A search prototype that demonstrates and annotates algorithms in action

3. Piloting of curriculum at library conferences and venues
Advisory Council

• Abigail Cabunoc Mayes (@abbcabs), Open Source Engagement at Mozilla
• Kate Eppler San Francisco Public Library
• Lisa Janicke Hinchliffe (@lusalibrarian), University of Illinois and ACRL
• Bethany Nowviskie (@nowviskie), Digital Library Federation
• Andromeda Yelton (@thatandromeda), MIT Libraries and Library & Information Technology Association
• Scott Young (@hei_scott), Montana State University Library
• Jan Zauha (@jzoo2), Montana State University Library
Preliminary Work
Survey of the Field

What do librarians know about algorithms?

How can we learn about algorithms?
The UX of Algorithms

- filtering
- searching
- ranking
- natural language processing
- parsing
- counting
- sorting
- vectorizing
Developing Algorithmic Awareness into the ACRL Framework

Address a gap in our field: a lack of an understanding around the rules that govern our software and shape our digital experiences.
Our Community, Our Opportunity

Library Technologists who are, at times, responsible for the algorithms we embed.

This is our teaching moment.
Ways to Contribute

• Feedback on Curriculum Modules
• Suggest Required Readings
• Contribute to Issues in Syllabus
• Contribute to Issues in Software Prototype
Project Home

https://github.com/jasonclark/algorithmic-awareness
Reach out to me. Contribute. Follow Along.

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