

#c4l18

# Building Competencies Around Algorithmic Awareness

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# Outline

Algorithm as Symptom

Grant Project

Opportunities

Future Direction

geary danley



All

Maps

News

Images

Shopping

More

Settings

Tools

About 76,700 results (0.34 seconds)

## Top stories



/pol/ - SHOOTER  
CONFIRMED : GEARY  
DANLEY - Politically  
Incorrect - 4chan

4Chan · 1 hour ago



50 dead, 200 injured in  
Las Vegas shooting

PressTV · 55 mins ago



/pol/ - Vegas happening  
thread  
scanners/streams:  
<https://> - Politically...

4Chan · 2 hours ago

→ More for geary danley



**Daisuke Wakabayashi**

@daiwaka

Follow



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."*

10:32 AM - 2 Oct 2017

279 Retweets 295 Likes



**“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?

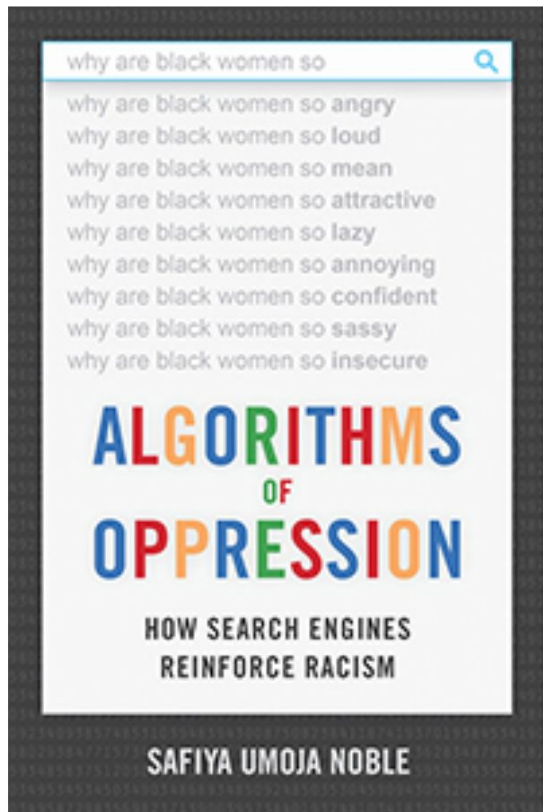
We could start to introduce new forms of literacy for our field

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



Table of Contents



Introduction

<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-72-17-0103-1>

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# 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 ([@abbycabs](#)), Open Source Engagement at Mozilla
- Kate Eppler San Francisco Public Library
- Lisa Janicke Hinchliffe ([@lisalibrarian](#)), 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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