Media Literacy Education for Adult Audiences:
# Decoding Algorithms

Fiona O'Connor, Senior Services Specialist
in Digital Literacy Initiatives

Announcements

- Today's webinar is a presentation of ALA's Public Programs Office and is the third session of five in our *Media Literacy Education for Adult Audiences: Architecture of the Internet* webinar series.

- This project was made possible by the Institute of Museum and Library Services grant number LG-13-19-0089-19.

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- Please visit ProgrammingLibrarian.org for program ideas and more free webinars.

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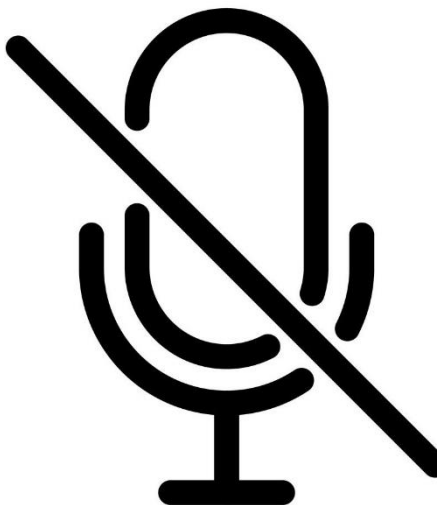
Only the presenter has **microphone** access. Enable captions by clicking on "Show captions".

Use the **Q&A** to ask questions of the presenter or ALA staff. (This includes technical questions.)

Use the **CHAT** to talk with your peers.

One-on-one virtual conversations

- Email Joanna Laursen Brucker at joannalb@knology.org if you are interested in participating!

Today's Presenter:

Fiona O'Connor, She/Her

Senior Services Specialist in Digital Literacy Initiatives

Toronto Public Library

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Media Literacy Education for Adult Audiences: Decoding Algorithms

Fiona O'Connor

Senior Services Specialist, Digital Literacy Initiatives

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Agenda

- Understanding what algorithms are and recognizing examples in daily life

- Identifying bias in algorithms and how it impacts the delivery of information

- Discussing strategies in educating adult patrons about the role and implications of algorithms

- Questions and discussion

Section 1: Understanding Algorithms: A Quick Overview

AI in Everyday Life

Why does Alexa respond so well to the questions I ask?

Wiki, Samuel, Echo Dot, 2021, *Wikimedia Commons.*
commons.m.wikimedia.org/wiki/File:Echo_Dot_%283rd_Gen%29_01.jpg (November 1, 2022).

AI in Everyday Life

Why did an online advertisement show me exactly the product I was thinking of buying?
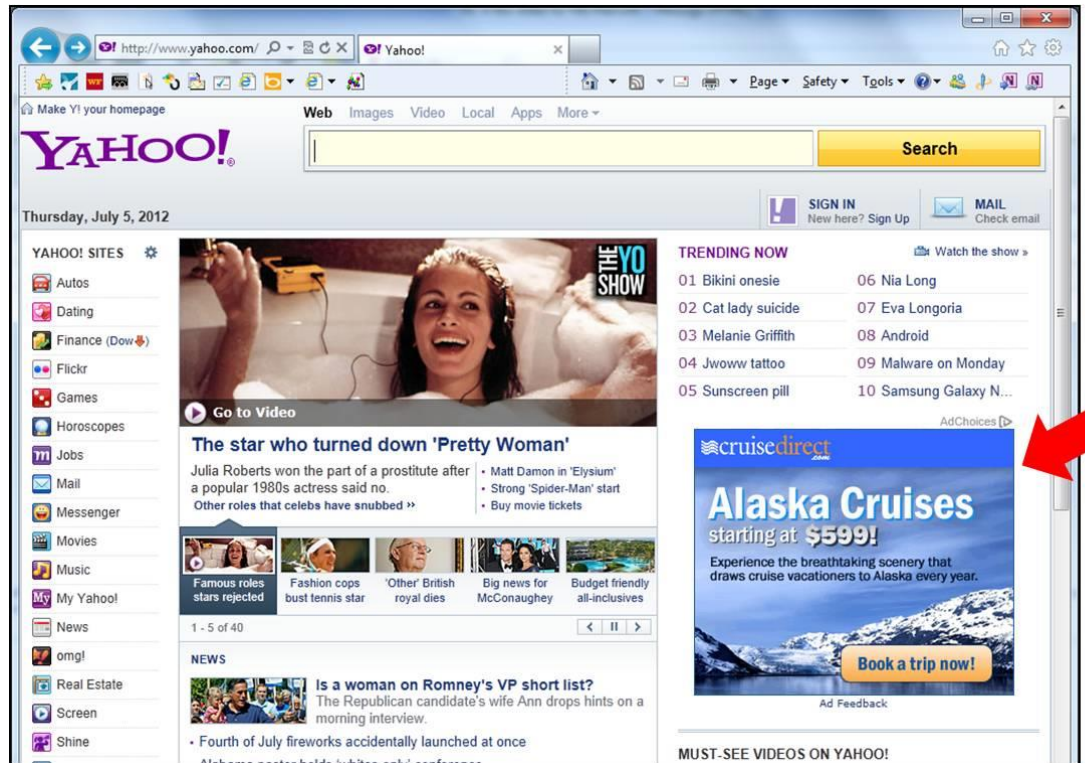
Advnblog, 2012. Advantage Networks.
https://advnblog.wordpress.com/2012/08/16/brands-network-providers-and-customers-all-win-with-targeted-advertising/ (November 1, 2022).

AI in Everyday Life

How does AI make recommendations for us?

Akrom, Ljung, *Tiktok Logo Render*, 2023. *Deviant Art.* https://www.deviantart.com/ijungakrom/art/Tiktok-Logo-Render-957728358 (April 2023).

Understanding Algorithms

What is an Algorithm?

It is a set of instructions with a given end result.
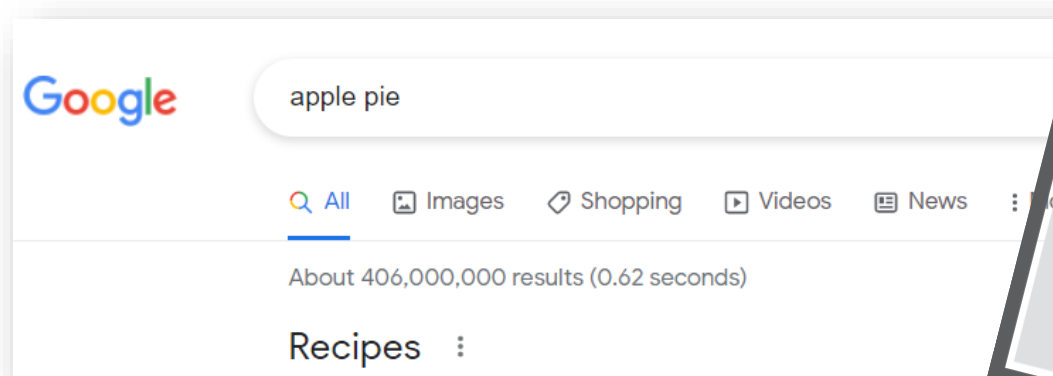
Understanding Algorithms

Google created algorithms that weighted links based on clicks.

Every click strengthens the artificial neural network, making the Google network more accurate.

Enter a search in your favourite browser

Click on the result that you think is best

Each time it is clicked, the algorithm becomes stronger and more accurate

Understanding Algorithms

KenStock, Apple Red Fruit, Pixabay, 2020.

Did you know
When google developed a machine learning process for smart reply suggestion in Google Gmail, it gathered over 200,000,000 million samples!!

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Understanding Algorithms

Select all squares with
traffic lights

SKIP

Select all images with
bridges
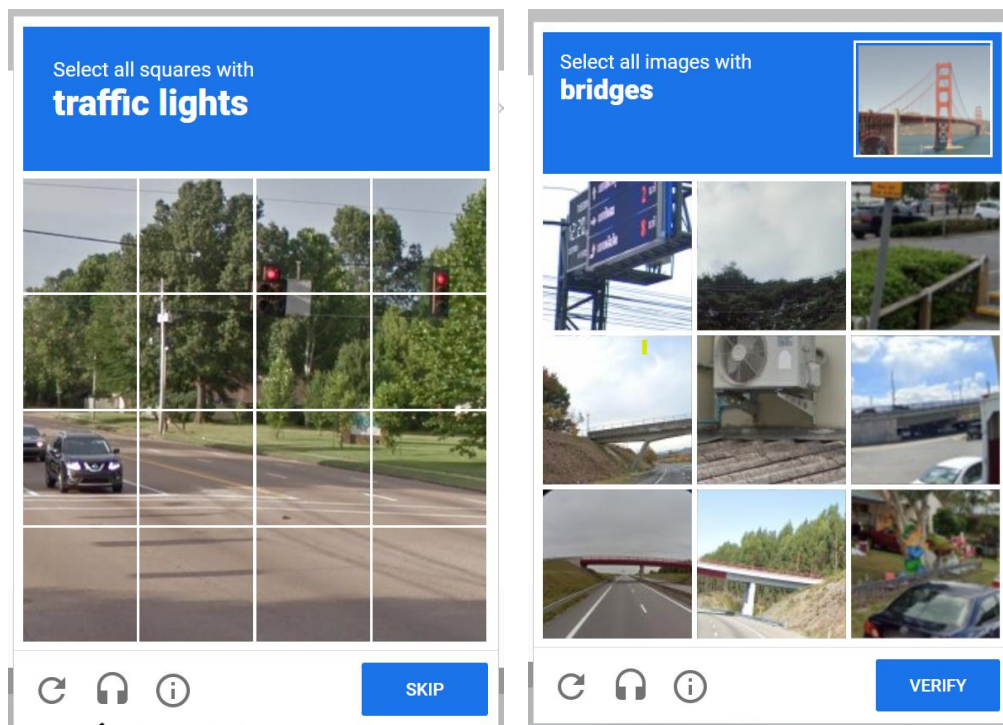
VERIFY

Did you know
Verifying images helps AI learn?

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Understanding Algorithms

How machine learning works

Input

train

Test and predict

output
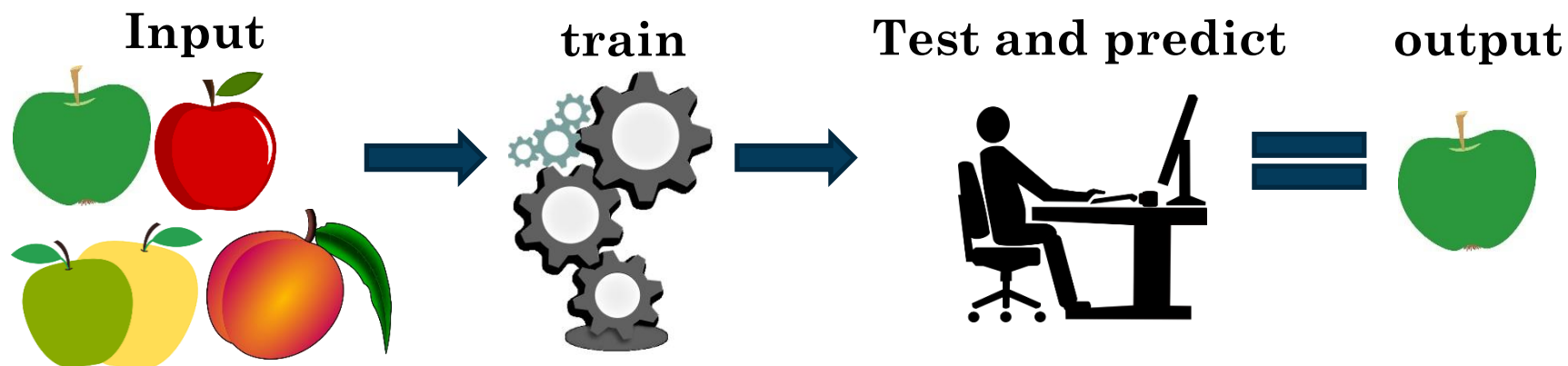
MostafaEITurkey36, Pixabay. 2020.

Curry, Stephanie, Pixabay. 2018

PagDev, office-work-workplace-chair-symbol. Pixabay. 2020.

Clker-Free-Vector-Images, apple-school-green-fall-food, Pixabay. 2024.

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Understanding Algorithms: Biases

Understanding Algorithms: Facial Recognition

MacKenzie, Mike, Facial Recognition, Flickr, 2018.
https://www.flickr.com/photos/mikemacmarketing/30188201497 (November 8, 2024).

Did you know facial recognition on your phone operates using an algorithm?

Section 2: Approaches to Decoding and Understanding Algorithms

Strategies

Strategies: Program Development

1 Data Privacy
How to stay safe online.

2 Artificial Intelligence
Introductory level on how it operates and interacts in our day to day.
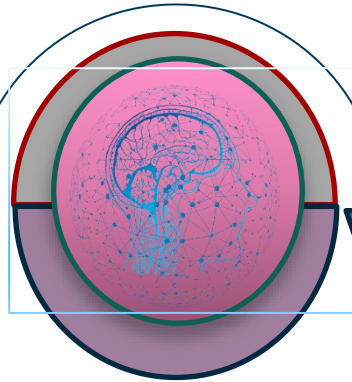
3 Misinformation and Disinformation
An intro how to combat it effectively.
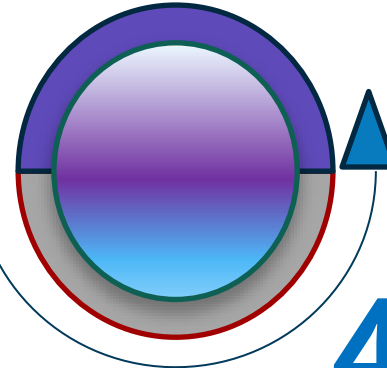
4 Data Visualization and Storytelling
An introductory program exploring the importance of data visualization.
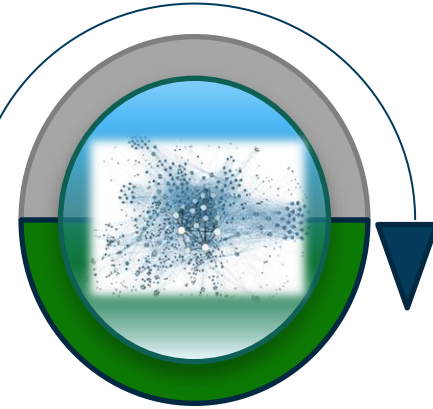
Strategies: Program Development

Edar, Diary-ipad-Workspace. Pixabay. 2015

Staff training for programs
- ➢ Learning Objectives
- ➢ Background information
- ➢ A run through of the program
- ➢ Role of the facilitator
- ➢ Program promotion and reporting
- ➢ Further resources
- ➢ Q & A

Strategies: Resources

(Toronto Public Library, 2024)

Strategies: Resources

Toronto Public Library, 2024)

Strategies: Resources

Toronto Public Library, 2024)

Strategies: Collaboration

Toronto Public Library, 2024

Toronto Public Library, 2023

Toronto Public Library, 2022

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Strategies: Digital Expo

The importance of knowing and staying safe in today's ever-changing digital world.

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Strategies: Digital Expo

"Championing Truth in the Digital Era," spotlighting misinformation and disinformation in emerging technologies.
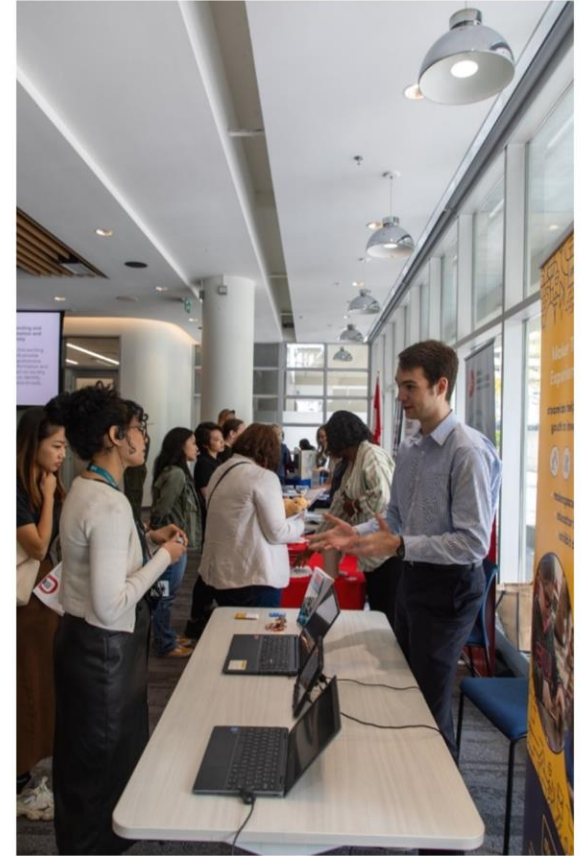
Toronto Public Library, 2024

Strategies: Partnerships

Toronto Public Library, 2023

Toronto Public Library, 2024

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Strategies: Innovator in Residence

IIR is an 8 Week residency comprised of programs, workshops and consultations

Toronto Public Library, 2022

Strategies

Toronto Public Library, 2022

Strategies: Lunch & Learn talks

Macrina, A. (2024, October 8). *Toronto Public Library Lunch & Learn with Library Freedom Project* [Invited Talk].

Sustainability

Programming

Partnerships

Building Resources

Staff training

Advocacy

Questions?

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LinkedIn:
https://www.linkedin.com/in/fiona-o-connor-7a384011

Please join us for the rest of the series!

Media Literacy Education for Adult Audiences: Free Webinar Series

ALA Public Programs Office   Sep 16, 2024

What determines the information that shows up in online search results? Why do results vary from person to person when the same search terms are used? Why do vacation ads appear across different websites after searching for a travel agent? The answers to these questions point to a set of structures that affect the information we all see and find online.

Join us for the Media Literacy Education for Adult Audiences: Architecture of the Internet webinar series, a five-part series that will focus on shedding light on the often-overlooked aspects of the internet that

https://bit.ly/media-lit-series

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