

AI and the Library World

an Online with the CMC webinar

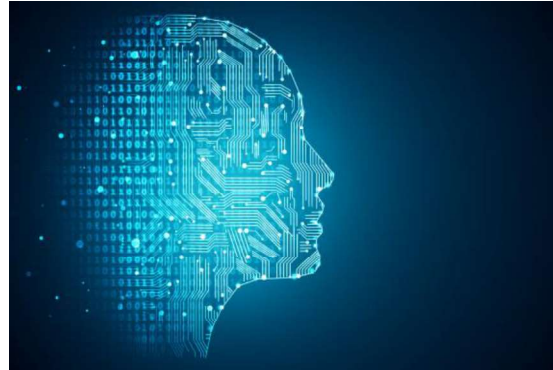
Eric McKinney
Cataloger
Cataloging Maintenance Center

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Intern
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April 11, 2024

Agenda

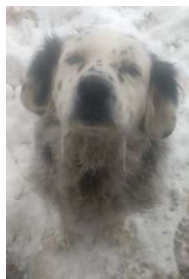
- Bios
- What is AI?
- What Can AI Do?
- Challenges with implementing AI
- Demo Time



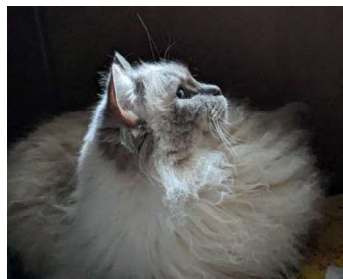
Anslie

Eric McKinney

- 15+ years of cataloging experience
- Married to a librarian
- Enjoys spending time with friends, family and pets
- Likes tacos



Tyrion



Griffin

Eric

Anslie Waldrep

- One of the CMC Interns this spring semester
- Currently pursuing my Master's Degree in Library and Information Science at the University of Iowa
- Also work at The Urbana Free Library as a Patron Services Specialist
- In my free time, I enjoy reading, puzzles and hanging out with my cats



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What is AI?

- AI = Artificial Intelligence
- Open AI's definition - "highly autonomous systems that outperform humans at most economically valuable work"
- Examples of free AI (AI that the public has access to)
 - ChatGPT – November 2022
 - BingAI – February 2023
 - Bard/Gemini – March 2023
- Biggest question with AI
 - How to evaluate the information coming from these sources?
 - ChatGPT 3.5

- AI – stands for artificial intelligence
- Open AI's definition - "highly autonomous systems that outperform humans at most economically valuable work"
 - What is OpenAI - artificial intelligence research organization
- Examples – free AI that the public can use/has access to
 - ChatGPT (access started in November 2022)
 - Free version is ChatGPT 3.5, 4.0 costs money to subscribe
 - Open AI
 - BingAI (access started in February 2023)
 - Microsoft's AI
 - Bard/Gemini (access started in March 2023)
 - Google's AI
- Many more free AI out exist
- Biggest question with AI
 - How to evaluate the information coming from these sources?
 - ChatGPT 3.5
 - For example, if we look back at ChatGPT 3.5, the last time it was updated was January 2022. This does not mean that the chat has not been updated in the last 2 years. This means that the chat does not recognize any real time information from January 2022.
 - It does not know who won March Madness

last year or if a famous person has died in the last two years

- In my experience, AI is easily and more helpful with inquiries that don't relate to real time news
 - "it's essential to verify from reliable sources for the most up-to-date information" - from ChatGPT

What Can AI Do?

- Chat
- Image
- Video

Eric

Chat GPT

Stable Diffusion, Dall-E

AI video creation has recently hit the scene.

Challenges with implementing AI

- Technological Constraints
 - Smaller libraries might not have the resources to maintain AI
 - Need to have a level of digital literacy to understand how to access but also use the AI technology
- Rapid pace of technology change
 - Since AI is constantly changing, libraries will have to update their systems and learn the new developments
- Ethical and privacy concerns
 - AI relies on data to function – this data could consist of patron data that is sensitive
 - Reader's advisory from AI – accessing their reading history
 - How can we protect data while also having access to a service that can be beneficial to our library?

- Technological constraints
 - Smaller libraries might not have the resources to maintain AI
 - There is a level of digital literacy needed to understand how to access and how to use AI technology
- Rapid pace of technology change
 - Since AI is constantly changing, libraries will have to update their systems and learn new developments as they come about
- Ethical and privacy concerns
 - AI relies on data to function – this data could consist of patron data that is sensitive
 - Ask AI to help with reader's advisory – they could be accessing a patron's reading history
 - How can we protect data while also having access to a service/technology that is beneficial to our library?

Challenges with implementing AI

- Bias
 - Can come about from the data that is used to train the AI or from the person who made the AI (algorithmic bias)
 - Reader's Advisory – how will the recommendations be fair and unbiased
- Not 100% perfect
 - AI is not perfect

■ Bias

- This can come about from the data that is used to train the AI or person who made the AI (algorithmic bias)
- Reader's advisory example – how can you know that the recommendations will be fair and unbiased
 - Example – if person who made AI loves mystery, the AI might recommend more mystery books to people

■ Not 100% Perfect

- AI is not perfect.
- While it is very helpful in giving us the information that we want, there are cases where the chat/inquiry that someone is trying to ask AI can be interpreted in a different way.
- I am sure all of Eric's inquiries are perfect but there are times where you might have to go back and forth with AI to get the answers that you want, or you might have to reword your initial inquiry to get the information that you require

Live demo

- Querying
- Call numbers
- Subject headings
- Library promotion
- Bib Records

Eric

Querying

- An AI is only as useful as the query

“Generative AI has the potential to change the world in ways that we can't even imagine. It has the power to create new ideas, products, and services that will make our lives easier, more productive, and more creative. It also has the potential to solve some of the world's biggest problems, such as climate change, poverty, and disease.”

Bill Gates

Eric – Briefly discuss how idea came about

Call numbers

- Library of Congress
- DDC 23

"The new spring in AI is the most significant development in computing in my lifetime. Every month, there are stunning new applications and transformative new techniques. But such powerful tools also bring with them new questions and responsibilities."

Sergey Brin

Eric

Subject Headings

- Will limit this portion to LoC for time purposes.

"It's not artificial intelligence I'm worried about, it's human stupidity."

Neil Jacobstein

Eric

Library Promotion

- Demo of image creators
 - DALL-E
 - Stable Diffusion

"AI can *hallucinate*, or present plausible but false information as if it were true."

Emily Udell

Eric

Bib. Records

- Bib. Record – scant information
- Bib. Record – more specific

“It has happened before; every technology revolution has led to loss of jobs. But new jobs get created, and there will be many new jobs created as part of this AI revolution.”

Raj Mukherjee

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ON THE CALL TODAY

Questions? Contact the CMC: cmc@illinoisheartland.org



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Questions?