There and Back Again:
A Playful Journey into Generative AI for Library Instruction

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&
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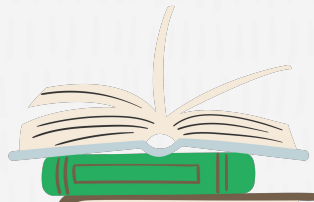Computer Science Librarian
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these slides: bit.ly/CCLIcuboulder

Hello!

- Who we are / what we do
- Where we are in our journeys with generative AI
- Institutional support for AI
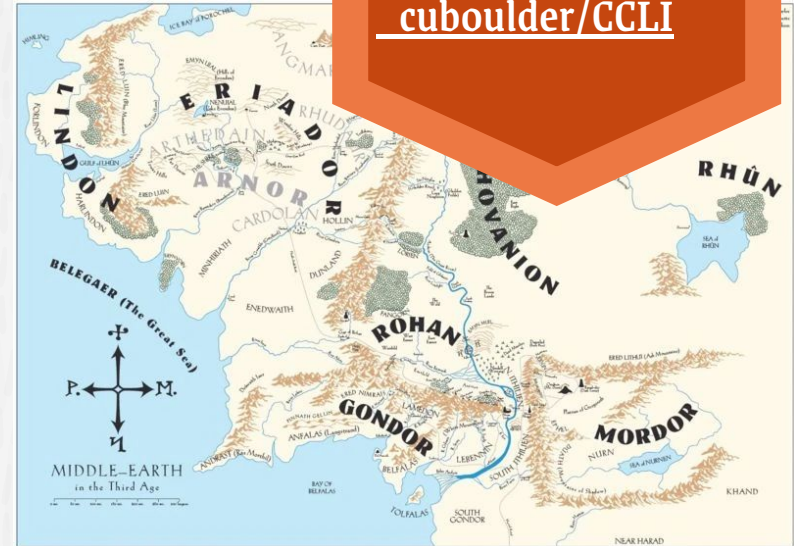
Overview for today

We will:

- Discuss the range of librarian *and* student experiences and perspectives on AI

- Briefly overview play in learning with AI

- Briefly overview ethics and the strengths/limitations of tools

- Experiment with AI tools & gamifying them

- Discuss considerations for implementing in the library classroom

MIDDLE-EARTH in the Third Age

B	I	N	G	O
Got "hallucinated" citations from a student	Asked a chat tool to write with a sense of humor	Heard a colleague say they would never teach with AI	Wrote a song with AI	Used DALL-E
Was asked about AI detection tools	Generated an "uncanny valley" image	Felt overwhelmed by the number of new AI tools	Used Poe	Read the privacy policy for a GenAI tool
Created an AI LibGuide	Created a meme about AI	FREE	Asked ChatGPT to write in the style of Shakespeare	Heard someone claim that AI will take all of our jobs
Someone asked you about AI and research	Used Copilot	Created a ChatBot	Learned what "prompt engineering" means	Wrote an email using an AI chat tool
Used ChatGPT	Felt annoyed by the constant barrage of news stories about AI	Used Elicit, ResearchRabbit, or Scite	Written code using an AI tool	Explored other types of AI

Discussion

Librarians,
what are
your thoughts
On AI?

AI Experiences and Concerns

Librarians

We may have a lot in common!
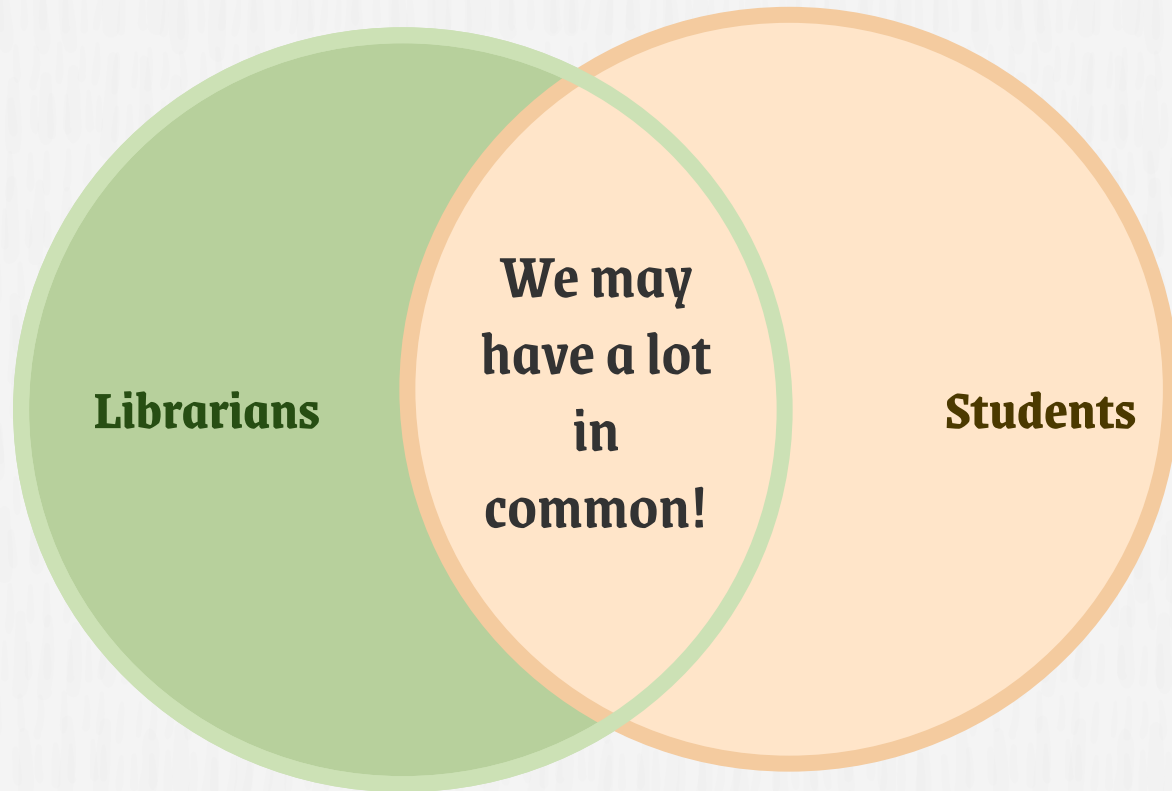
Students

Student and Librarian Shared Experiences with AI

- **Feeling pressure to know these tools**
  - **Finding them intimidating**
  - **Assume peers are already doing so**
- **Fears of being "replaced" in the workplace**
- **Finding AI tools useful**
  - **but grappling with ethical concerns**
- **Burnout and overwhelm**
- **Fear of who is controlling information**

We believe play and playfulness can help address these concerns

Why Bring Play Into It?

- **Classroom atmosphere:**
  - Students participating in their own learning
  - Open-ended problem solving
  - Mutual learning as we too learn about AI
- **Bonuses for us:**
  - staving off cynicism
  - combating burnout with fun and creativity
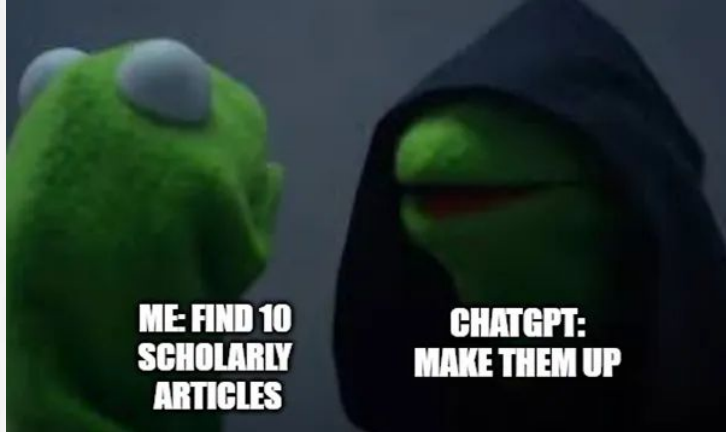 - humor as a coping mechanism

Ethics

- Bias and Discrimination

- Environmental Impact

- Data Privacy and Data Sovereignty

- Workers' Rights

- Spread of Misinformation

Counterpoints:

Indigenous AI

AI Manyfesto (Decolonial AI)

Activity: choose your own adventure

- **Frameworks**
  - Our "potential pathways" are just that - guidelines more than actual rules
  - We are co-creating these adventures together
  - Breaking open the "black box" of Generative AI
- **Goals**
  - Explore these tools (or information about them)
  - Think about the gaps and weaknesses

Let's play!

Choose your own adventure:
- ChatGPT
- Copilot
- Poe
- Semantic Scholar
- Research Rabbit
- Gandalf

Tell your tales: padlet.com/katerina_cuboulder/CCLIadventures

ChatGPT

Wayfinding:
https://chat.openai.com/

Guidebook:
- Account creation required
- Access to the newest model GPT 4o is available for free, but free accounts are limited

Potential pathways:
- Ask ChatGPT to:
  - Create a lesson plan
  - Generate search terms
  - Find scholarly sources
  - Write an email
  - Tell a joke
  - Explain itself
- Find where to finetune your settings for responses

back to choose another adventure

Copilot

Wayfinding:
https://copilot.microsoft.com/

Guidebook:
- Can ask four questions without sign-in, but account creation required for further interaction (and image generation)
- Free accounts are limited (to creating three images per day, may be wait times to access GPT-4 and GPT-4 Turbo during peak hours)

Potential pathways:
- Ask Copilot to:
  - Create a lesson plan
  - Generate search terms
  - Write an email
  - Find scholarly sources
  - Tell a joke
- Find where to finetune your settings for responses

back to choose another adventure

Poe

Wayfinding:
https://poe.com/

Guidebook:
- Bots from official AI models as well as users
- Account creation required
- Limited number of messages per day with free accounts, some models restricted to paid users

Potential pathways:
- Find the silliest bot
- What are failure points in these bots?
- Create a bot

Points of Interest: ResearcherGuide, BermanBot

back to choose another adventure

Semantic Scholar

Wayfinding:
https://www.semanticscholar.org/

Guidebook:

- **Semantic Scholar Tutorial**
- Account creation required
- Currently free to users, committed to always being free and open

Potential pathways:

- Explore the corpus of papers
- What can you find?
- What's not there?
- How do summaries reflect
- Are there any patterns to recommendations?

back to choose another adventure

Research Rabbit

Wayfinding:
https://www.researchrabbit.ai/

Guidebook:

- **Research Rabbit Review by Victoria Cole**
- Account creation required
- Zotero import!

Potential pathways:
- Explore the corpus of papers
- What can you find?
- What's not there?
- What do the visualizations tell us about our research topic?
- An existing collection to play with

Gandalf

Wayfinding:
https://gandalf.lakera.ai/advent
ure-6

Guidebook:
- No account creation required
- Created by an AI security company (logs may be used to improve their products)

Potential pathways:
- Gandalf is specialized, designed to teach prompt injection
- Discuss … What does this say more broadly about AI?
- There are many Gandalfs to explore!

back to choose another adventure

Why gamification? (rather than games-based learning)

Transforming into Games

- **Trivia or Jeopardy**
  - Reviewing broad concepts
  - Distinguishing between specific tools and their uses
- **Scavenger Hunt**
  - For understanding prompt engineering
- **Choose Your Own Adventure**
- **Image Generation tools: fascinating possibilities**

Tools: Google Forms, Slides, Qualtrics, Lumi

More Considerations for the Classroom

- **Scoping for one-shots:** time constraints mean that playthrough of actual games is difficult
- **High maintenance:** games-based learning is intensive work, writing games for specific AI tools may not be sustainable
- **Flexibility and repeatability:** activities suited towards exploring general concepts
- **There are potential downsides of a playful approach**

And more? Let's talk about it!
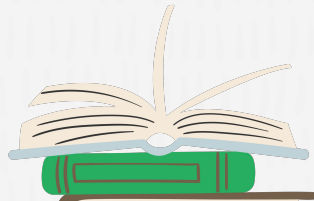
Artificial intelligence (AI) technologies, and in particular, generative AI, have significant potential to improve access to information and advance openness in research outputs.

AI also has the potential to disrupt information landscapes and the communities that research libraries support and serve.

! Resistance to the "AI future" is not futile

Thank you!

We'd love to talk more, feel free to reach out:
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References are on the following slides.

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