# **Advancing AI Literacy**

# An Analysis of AI Library Research Guides at R1 Universities

Daniela Solomon, Shatha Baydoun, and Thilani Samarakoon

The introduction of ChatGPT in 2022 renewed interest in Artificial Intelligence (AI), sparking a wave of integration of AI technologies across higher education. However, many users still lack AI literacy competencies essential for the effective use of these tools. This study employed a mixed-method approach to examine AI library research guides at R1 institutions, focusing on their content and coverage. By analyzing 102 research guides, the study uncovered significant variability, with many guides failing to address critical topics in AI literacy, such as prompt engineering, AI biases, and the ethics of AI use. This paper argues that well-designed library guides are essential for promoting information literacy and offer best practices for developing effective AI library guides in academic libraries.

#### Introduction

Since the emergence of ChatGPT in 2022, interest in Artificial Intelligence (AI) has surged, especially in its applications within higher education and academic libraries. However, despite this growing interest, a significant gap in AI literacy persists among students and faculty. To address this issue, a comprehensive study was conducted to analyze AI-related research guides at R1 institutions. This study assessed 102 research guides, focusing on their coverage of essential AI literacy components such as knowledge, application, and analysis. The findings revealed substantial variations in content, with many guides failing to address critical topics like prompt engineering, inherent biases in AI, and ethical use of AI. This study argues that well-crafted library guides are crucial in promoting responsible AI technology use in higher education and presents best practices for developing effective AI-focused library research guides aimed at fostering responsible AI usage in academic settings.

#### **Literature Review**

In 2016, Yoko introduced the concept of AI literacy as a subset of digital literacy.<sup>1</sup> As a nascent, interdisciplinary, and evolving field, AI literacy still lacks consensus on its definitions and frameworks. AI literacy entails more than just knowing AI applications<sup>2</sup> and AI capabilities.<sup>3</sup> It also requires an understanding of AI's ethical and societal implications<sup>4</sup> and an ability to apply AI responsibly, creatively, and efficiently.<sup>5</sup>

Long and Magerko broadly defined AI literacy as a set of digital competencies necessary for AI to transform the "way that we communicate, work, and live with each other and with machines."<sup>6</sup> In their literature review grounded in Bloom's Taxonomy,<sup>7</sup> Ng et al. identified four key competencies that provide students with the ability to use, evaluate, and design with AI in different scenarios

Daniela Solomon (email: dxs594@case.edu) is Research and Engagement Librarian, Kelvin Smith Library, Case Western Reserve University, Cleveland, OH; Shatha Baydoun (email: sbaydoun@bu.edu) is Head Librarian, Arts and Humanities, Boston University, Mugar Memorial Library,Boston, MA; Thilani Samarakoon (email: thilani.samarakoon@miami.edu) is Biomedical Data Librarian, Otto G. Richter Library, University of Miami, Coral Gables, FL.

and applications while integrating principles of fairness, accountability, transparency, ethics, and safety.<sup>8</sup> More recently, a framework was introduced for Al literacy in academic libraries, focusing on seven key competencies.<sup>9</sup> These competencies focus on guiding students toward understanding the capabilities and limitations of Al, identifying and evaluating potential Al applications in library settings, and effectively utilizing Al tools.<sup>10</sup> Furthermore, the framework underscored the importance of critically evaluating Al for quality, biases, and ethical considerations; engaging in informed discussions and collaborations regarding Al; acknowledging data privacy and security concerns; and anticipating the impacts of Al on library stakeholders.<sup>11</sup>

The promotion of AI literacy in academic libraries has potential benefits, including fostering creativity, improving critical thinking skills, and preparing students for work in the digital era.<sup>12</sup> The inconsistent incorporation of AI into curricula, especially in non-STEM fields, underscores the importance of pedagogies and curricula that promote AI literacy across various disciplines.<sup>13</sup> Moreover, concerns exist about the widening digital divide and the challenges in ensuring equitable access to AI education and resources, particularly in higher and adult education settings.<sup>14</sup> This divide disproportionately impacts marginalized groups, such as low-income individuals and rural communities by limiting access to technology and internet connectivity and the overall utilization of AI tools.

#### Methodology

In this study, we analyzed library research guides on AI at R1 institutions, as classified by the Carnegie Classification of Higher Education Institutions. AI refers to technology that enables computers and machines to replicate human-like problem-solving and cognitive abilities. Generative AI is a subset that specifically focuses on creating new content such as text, images, music, or coding—based on patterns it has learned from existing data. Since most AI guides focused on Generative AI or Gen AI, we excluded those focused on general artificial intelligence resources. This approach streamlined data collection and analysis, ensuring consistency in evaluating Gen AI resources.

Using a mixed-method approach, the data collection process was conducted in two phases: the initial phase spanned from November to December 2023, with a subsequent revisit between January and February 2024 to minimize the risk of missing any guides. The final data set for our investigation was completed on February 29, 2024. To reduce bias, data was collected by three authors in two iterative rounds, with each author checking the data on a different section of the spreadsheet and reaching an agreement on contentious items.

During data collection, we evaluated whether the guides stood as standalone entities or if Al topics were integrated as sections within other guides. We also examined the presence of multiple guides addressing Al topics within the institutional libraries, analyzed the creators of these guides, and identified their intended audience. Additionally, our data collection encompassed the multifaceted dimensions of Al literacy coding delineated by Ng et al. to include knowledge, application, evaluation, and creation, along with the ethics of Al use.<sup>15</sup> The data was then summarized in terms of frequencies and percentages.

#### Results

We analyzed research guides from 146 R1 institutions, including multiple AI guides from the same institutions, resulting in assessing a total of 102 guides. Of these, 74 guides (72.6%) were found

to be tailored for a general audience, 20 guides (19.6%) were specifically aimed at students, and 8 guides (7.8%) were designed for faculty members. This is reflective of general norms since library research guides play a vital role in fostering information literacy and enhancing the academic and professional capabilities of student users. Additionally, 70 (68.6%) of the guides were stand-alone, while 32 (31.4%) were part of another research guide.

In our exploration of AI literacy, we categorized the topics into several key areas. The first area, "Knowing AI," focused on whether the guides mentioned multiple AI tools, providing foundational understandings beyond ChatGPT. The second area, "Applying AI," examined whether the guides delved into practicalities such as prompt engineering, which is essential for effectively utilizing AI in various contexts. The third area, "Evaluating and Creating AI," assessed whether the guides addressed critical issues such as misinformation, disinformation, deepfakes, hallucinations, and biases, including racial biases, algorithmic transparency, along with selection and training biases. These discussions are crucial for understanding the potential pitfalls of using AI. Lastly, the "AI Ethics" section evaluated whether the guides covered important topics like academic integrity and citation, copyright, accessibility, digital divide, data privacy, and data security. These ethical considerations ensure that students use AI responsibly and equitably.

# Knowledge of AI

The coverage of Al tools in the guides prominently featured ChatGPT, with a significant focus on its capabilities and applications. Specifically, 31 guides, accounting for 30.4% of the total guides, concentrated on ChatGPT, underscoring its popularity and widespread use among students. As the data in Table 1 shows, multiple Al tools were highlighted in 64 of the guides, representing 62.7% of the total, with ChatGPT being the most frequently referenced tool.

Coverage of AI Tools	Count (n=102)
Text	31 (30.4%)
Multiple	64 (62.7%)
None	7 (6.9%)

#### Table 1. Coverage of AI Tools

# **AI Application**

Prompt engineering is also crucial for Al literacy, particularly for students, as it empowers them to effectively interact with Al models, ensuring they can extract accurate and relevant information.

Table 2 shows that out of the 102 research guides, 36 (35.3%) discussed prompt engineering, with some guides defining prompts<sup>16</sup> and providing examples. For instance, the guide from Florida International University defined a prompt as a "set of instructions used to ask a language model to perform a task," while the University of California-Irvine guide defined a prompt as a topic that guides the writing content.<sup>17</sup>

 Table 2. Coverage of Prompt Engineering

Prompt Engineering	Count (n=102)
Included	36 (35.29%)
Not included	66 (64.71%)

# **AI Analysis and Evaluation**

In our evaluation of the guides, we focused on how they addressed the critical issues of misinformation, hallucinations, and deepfakes. Hallucinations and misinformation were more frequently discussed than deepfakes, highlighting the prevalent concerns surrounding the accuracy and reliability of AI-generated content. Specifically, hallucinations, which refer to instances where AI models generate incorrect or nonsensical information, were mentioned in 51 guides, accounting for 50.0% of the total (Table 3). Misinformation or disinformation, involving the spread of false or misleading information, was addressed in 59 guides, or 57.8%, reflecting its significant impact on public perception and trust in AI. In contrast, deepfakes, which involve the creation of realistic but fabricated media, were mentioned in only 19 guides, representing 18.6% of the total. This disparity suggests that while deepfakes are a concern, the immediate challenges posed by hallucinations and misinformation are perceived as more pressing issues in the context of AI literacy.

Торіс	Included	Not Included
Misinformation (n=102)	59 (57.8%)	43 (42.2%)
Deepfake (n=102)	19 (18.6%)	83 (81.4%)
Hallucinations (n=102)	51 (50.0%)	51 (50.0%)

Table 3. Coverage of Misinformation, Deepfake, and Hallucinations

Evaluation of machine bias was crucial in library guides to ensure accuracy since this significantly impacts AI-generated outcomes. Biases can arise from several factors, including algorithmic transparency, selection and training processes, and racial biases. making them essential to address fostering trust and equity in AI tools.

The results from Table 4 show that many guides failed to address these categories adequately. Only a third of the guides mentioned selection, training, and racial biases, and only 22 (21.6%) guides discussed algorithmic transparency.

Table 4. Coverage of Racial Biases, Algorithmic Transparency, Selection/Training Biases

Торіс	Included	Not Included
Racial biases (n=102)	32 (31.4%)	70 (68.6%)
Algorithmic transparency (n=102)	22 (21.6%)	80 (78.4%)
Selection/training biases (n=102)	30 (29.4%)	72 (70.6%)

# Ethical AI Use

The results from Table 5 show that out of the 102 library guides, academic integrity and citations were addressed in 78 guides (76.5%), while copyright was mentioned in 43 guides (42.2%).

Table 5. Coverage of Academic Integrity and Copyright

Торіс	Included	Not Included
Academic Integrity/Citation (n=102)	78 (76.5%)	24 (23.5%)
Copyright (n=102)	43 (42.2%)	59 (57.8%)

The researchers in this study also looked at accessibility, digital divide, data privacy, and data security (Table 6). While the digital divide was the least addressed topic, with only 9 guides (8.8%) covering the issue, 42 guides (41.2%) focused on the ethical implications of data privacy, making it the most addressed topic.

Торіс	Included	Not Included
Security (n=102)	21 (20.6%)	81 (79.4%)
Accessibility (n=102)	13 (12.8%)	89 (87.2%)
Data privacy (n=102)	42 (41.2%)	60 (58.8%)
Digital divide (n=102)	9 (8.8%)	93 (91.2%)

Table 6. Coverage of Accessibility, Digital Divide, Data Privacy and Security

#### Discussion

The analysis of library guides from R1 universities revealed diverse approaches to presenting information on AI. Most guides are designed with the general audience in mind. However, only eight library guides specifically targeted faculty, a gap that can be explained by the availability of curated faculty resources from campus offices like writing centers or teaching and learning centers. Interestingly, thirty-two AI-related guides are integrated with other subject guides, suggesting that not all librarians felt comfortable with being the library's AI specialist.

Understanding AI terminology is also critical for incorporating AI into learning and research, as it avoids misinterpretation and promotes accessibility. While some guides include a glossary of AI terms, most of the guides we studied needed improvement in this area (see APPENDIX A for our glossary). Additionally, many guides are designed around ChatGPT, which is the most frequently cited AI chatbot. However, other AI tools are useful in enhancing learning, streamlining the research process, and improving overall academic performance. Therefore, a careful curation of AI tools needs to be considered. To optimize the use of AI tools, guides should categorize these tools by functionality and provide brief descriptions of each tool.

Another notable observation was the limited discussion on prompt engineering, a critical part of interacting with AI tools. Effective prompt engineering is essential for using AI tools, yet few guides addressed this topic. This omission highlights a significant gap in the resources provided by the library, potentially affecting users' ability to leverage AI tools effectively. Most guides also failed to give examples of prompt engineering which can provide users with clarity and guidance and help users understand how to frame their questions for effective responses.

In contrast, misinformation or disinformation resulting from AI use was a topic addressed by many guides. The prevalence of misinformation is a critical issue for AI tools that can propagate false information. The relatively high number of guides covering this topic underscores its importance and enforces the library's commitment to educating users about the risks and management of misinformation and disinformation. In contrast, very few guides discussed the topic of deepfakes, which involves the manipulation of media files to create false but convincing media. Deepfakes represent a significant and growing challenge in AI use. The limited coverage of this topic suggests that more comprehensive resources are needed to educate users about the risks and detection of deepfakes.

Multiple guides also addressed the issues of AI hallucinations. The relatively frequent mention of hallucinations in the library guides indicates a growing recognition of the diverse challenges posed by AI use, especially among students. However, as hallucinations are a less understood phenomenon, more comprehensive coverage and resources are needed. Library guides should provide detailed explanations and examples of AI hallucinations to help users identify and mitigate these occurrences.

# Limitations

Researchers established a timeline to identify research guides, aiming to conclude by February 2024, with data extraction completed by June 2024. However, the rapid advancements in the AI field meant that some data quickly became outdated. Librarians regularly update guides as new information and tools emerge, which could lead to discrepancies between our data and the currently available guides, potentially impacting the relevance of the study's findings over time. The lack of standardization among the guides resulting in divergent formats, structures, and content posed a significant limitation. This variability required considerable time for data extraction, bias rectification, and management of individual researcher subjectivity. To address these challenges, researchers used a pre-discussed data extraction form and resolved disparities through discussion.

Additionally, the limited number of guides focused on faculty prevented comparisons between student and faculty guides. The study only examined guides created by the library, excluding those from teaching and writing centers or other campus institutions, as they were beyond the scope of the study's aims. The variability among the guides necessitated significant time for data extraction, and the diverse perspectives and expertise of individual researchers introduced potential bias and subjectivity. To minimize these factors, researchers employed a pre-discussed data extraction form, involving multiple researchers in the process, and resolved discrepancies through discussion.

# **Best Practices for AI Research Guides**

Improving the structure and clarity of AI library guides involves focusing on content, design, and usability. While the best practices mentioned here are specific to guides on generative AI, many are also applicable to library research guides in general.

**Content:** Al-related library research guides should prioritize clear and concise content with welldefined learning objectives that highlight resources at the library or institution. Suggested pages include "Getting Started with Al Research," "Al Tools for Research," "Al in Library Databases," and the "Ethical Consideration of Al Use." Creating separate tabs for "Students" and "Faculty" in a generative Al research guide ensures tailored information, addressing the distinct needs and concerns of each group. Defining key terms such as generative Al, large language models (LLMs), and ChatGPT is crucial for giving students, regardless of prior knowledge, a foundational understanding of Al concepts. This practice also demystifies complex ideas and empowers students to confidently use Al tools. During usability testing, Bergstrom-Lynch found that students expressed frustration with inconsistent and unclear terminology. Therefore, Al guides should avoid using jargon, and should instead use plain language.<sup>18</sup> Lastly, the "Student" page must include detailed information on ethical Al use, discussing machine and human biases, as well as the general limitations of Al output. Copyright information, citing Al-generated content, Al assistance disclosure, and evaluative methods of Al output must also be included in the "Student" section. A dedicated "Faculty" section or tab in an AI research guide should list resources for integrating AI tools into curriculum design and promoting AI literacy. Specifically, guides that thoroughly explain concepts like prompt engineering equip faculty with the knowledge to use and understand AI tools. Moreover, guides that explore the ethical and legal implications of AI—addressing issues like data security, hallucinations, and racial bias—are crucial for a well-rounded understanding of AI. Lastly, the "Faculty" section should list relevant library databases and university resources so faculty can integrate these resources into their teaching and research practices.

**Structure, Design, and Organization**: Applying cognitive load theory to guide design is a general best practice because it fosters effective instructional materials.<sup>19</sup> Cognitive load theory asserts that learning is restricted by our limited cognitive capacity, and learners may become overwhelmed when required to process numerous informational elements and their interactions simultaneously. The theory underscores the importance of implementing strategies that reduce the load on working memory, enabling the efficient storage of information and its processes in long-term memory.<sup>20</sup> Specifically, reducing the content load and maintaining a consistent layout for text and graphics generates clear cues for the users and provides a more engaging learning experience.<sup>21</sup> For Al-related library research guides, we recommend a simple and clean layout comprising five to seven tabs. For better browsing, Bergstrom-Lynch suggests one or two-column layouts with left-hand side navigation. This design is in line with users' expectations for web content and their natural reading habits.<sup>22</sup> To further enhance user experience, Al research guides should also include "Previous" and "Next" buttons at the bottom of each page. This allows for a seamless progression of the guide's content, encouraging users to explore all the listed resources.

Focused and easily digestible sections in AI guides that strike a balance between brevity and comprehensiveness improve the user experience. Concise bullet lists instead of lengthy text blocks significantly improve readability and information retention. This formatting lets users scan and absorb key points, enhancing accessibility and usability. Furthermore, Burchfield and Possinger suggest incorporating images, icons, and brief explanations to cater to students' preferences.<sup>23</sup> The most effective guides, for example, included an infographic that listed AI literacy competencies. Alternatively, multimedia elements such as video tutorials resulted in guides that were more accessible and engaging. Indeed, visual resources quickly communicate complex ideas and relationships, making them particularly valuable in topics like generative AI.

**Usability:** Prioritizing user experience is key when creating generative Al library research guides. Therefore, it is crucial to focus on usability, usefulness, desirability, and value. Students often expect to find the most important information under the 'Home' tab, so including links to key resources like Al tools improves usability. As Bergstrom-Lynch notes, placing relevant database links prominently on the landing page is effective, since the homepage and database page receive the heaviest use.<sup>24</sup>

It is also important to periodically check links and curate new content to maintain user satisfaction and engagement. Broken links and outdated information can negatively impact users, particularly in the rapidly evolving field of AI. Moreover, regular updates ensure that the guide remains a valuable resource, providing the latest insights and tools in generative AI.

# Conclusion

Libraries play a crucial role in advancing Al literacy by providing well-curated and accessible resources that cater to the diverse needs of students, researchers, and faculty members. To be effective, libraries must carefully curate relevant resources and adhere to best practices, ensuring

that guides are not only informative but also accessible and practical. Well-designed guides should feature clearly defined learning objectives, concise content, straightforward language, and a logical structure that facilitates easy navigation and comprehension. Indeed, a well-designed library guide promotes AI literacy by covering key topics and providing information on AI applications and tools. Furthermore, guides that thoroughly articulate the ethical, social, and legal concerns of AI promote critical thinking and equip users to use, apply, and evaluate AI tools responsibly. By incorporating interdisciplinary perspectives and interactive elements, AI library guides can support users with informed decision-making and adapt to the ongoing developments in the AI landscape. Additionally, maintaining current and user-focused content is crucial for fostering AI literacy in a rapidly evolving field. Incorporating user feedback along with insights from stakeholders is also vital since this ensures that library guides remain relevant and responsive to the needs of the audience.

#### References

- 1. Yoko, Konishi. "What is Needed for AI Literacy?." RIETI 独立行政法人経済産業研究所. 2016. Accessed March 4, 2025. https://www.rieti.go.jp/en/columns/s16\_0014.html.
- Wang, Bingcheng, Pei-Luen Patrick Rau, and Tianyi Yuan. "Measuring User Competence in Using Artificial Intelligence: Validity and Reliability of Artificial Intelligence Literacy Scale." *Behaviour & Information Technology* 42 (9) (2023): 1326. https://doi.org/10.1080/0144929X.2022.2072768.
- 3. Markauskaite, Lina, Rebecca Marrone, Oleksandra Poquet, Simon Knight, Roberto Martinez-Maldonado, Sarah Howard, Jo Tondeur, et al. "Rethinking the Entwinement between Artificial Intelligence and Human Learning: What Capabilities Do Learners Need for a World with AI?" *Computers and Education: Artificial Intelligence* 3 (January 1, 2022): 100056. https://doi.org/10.1016/j.caeai.2022.100056.
- 4. Southworth, Jane, Kati Migliaccio, Joe Glover, Ja'Net Glover, David Reed, Christopher McCarty, Joel Brendemuhl, and Aaron Thomas. "Developing a Model for Al Across the Curriculum: Transforming the Higher Education Landscape via Innovation in Al Literacy." *Computers and Education: Artificial Intelligence* 4 (January 1, 2023): 100127. https://doi.org/10.1016/j.caeai.2023.100127.
- Deuze, Mark, and Charlie Beckett. "Imagination, Algorithms and News: Developing Al Literacy for Journalism." Digital Journalism 10, no. 10 (November 26, 2022): 1913–18. https://doi.org/10.1080/21670811.2022.2119152.
- Long, Duri, and Brian Magerko. "What Is AI Literacy? Competencies and Design Considerations." Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems, 1–16. CHI '20. New York, NY, USA: Association for Computing Machinery, 2020. https://doi.org/10.1145/3313831.3376727.
- 7. Anderson, Lorin W. and David R. Krathwohl. A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. London: Pearson, 2001.
- Ng, Davy Tsz Kit, Min Lee, Roy Jun Yi Tan, Xiao Hu, J. Stephen Downie, and Samuel Kai Wah Chu. "A Review of Al Teaching and Learning from 2000 to 2020." *Education and Information Technologies* 28, no. 7 (July 1, 2023): 8445– 8501. https://doi.org/10.1007/s10639-022-11491-w.
- 9. Lo, Leo. "Evaluating AI Literacy in Academic Libraries: A Survey Study with a Focus on U.S. Employees." College & Research Libraries 85, no. 5 (2024), 635-654. doi:10.5860/crl.85.5.635.
- 10. lbid., 651.
- 11. Ibid., 652.
- 12. Southworth et al., Developing a Model for Al Across the Curriculum, 100127.
- 13. Ng et al., Conceptualizing Al Literacy, 8445–8501.
- 14. Ibid.
- 15. Ibid.

- 16. Castillo, Melissa Del. "FIU Libraries: Artificial Intelligence Now: ChatGPT & Al Literacy Toolbox: Welcome." Accessed October 24, 2023. https://library.fiu.edu/ai/welcome.
- 17. Brinkman, Stacy. "Research Guides: Generative AI and Information Literacy: AI and Information Literacy." Accessed October 29, 2024. https://guides.lib.uci.edu/gen-ai/info-literacy.
- Bergstrom-Lynch, Yolanda. "LibGuides by Design: Using Instructional Design Principles and User-Centered Studies to Develop Best Practices." *Public Services Quarterly* 15, no. 3 (July 2019): 212. https://doi.org/10.1080/15228959.2 019.1632245.
- **19.** Lee, Yoo Young, and M. Sara Lowe. "Building Positive Learning Experiences through Pedagogical Research Guide Design." *Journal of Web Librarianship* 12, no. 4 (July 15, 2018): 209. https://doi.org/10.1080/19322909.2018.1499453.
- **20.** Little, Jennifer J. 2010. "Cognitive Load Theory and Library Research Guides." *Internet Reference Services Quarterly* 15 (1): 53–63. doi:10.1080/10875300903530199.
- **21.** Ashman, Greg. *A Little Guide for Teachers: Cognitive Load Theory.* 1st edition. A Little Guide for Teachers. Thousand Oaks: SAGE Publications Ltd, 2023.
- 22. Bergstrom-Lynch, *LibGuides by Design*, 212.
- 23. Burchfield and Possinger, Managing Your Library's LibGuides, 11.
- 24. Bergstrom-Lynch, *LibGuides by Design*, 212.

#### **APPENDIX 1: GLOSSARY**

**Academic Integrity/Citations:** Referred to the mention of the need to cite AI tools and/or the role of AI in academic integrity policy.

**Accessibility:** Referred to guides that discuss any of the issues related to accessibility (physical, sensory, cognitive, or neurological capabilities) of AI tools.

**Al Tools:** Referred to software applications or platforms that utilize artificial intelligence and machine learning techniques to perform specific tasks or solve a particular problem. The most famous of these are text-based Al tools like Chat GPT or Perplexity. However, Al tools for video, images, and text-to-voice, along with others are also listed.

**Algorithmic Transparency:** Referred to Algorithmic transparency is openness about the purpose, structure, and underlying actions of the algorithms used to search for, process, and deliver information https://www.techtarget.com/searchenterpriseai/definition/algorithmic-transparency.

**Audience:** Referred to the intended audience or users or the guide whether students, faculty, or multi-users.

**Copyright:** Referred to guides that address copyright infringement concerning the data used for training artificial intelligence.

**Creators:** Referred to the main content creators of the guides including library or librarians or outside the library like the Writing/English Centers, Teaching and Learning Centers, or other units at the institutional level.

**Data Privacy:** Referred to guides that discuss the lack of protection of individual's personal data and the preservation of their privacy rights in the context of AI tools.

**Data Security:** Referred to guides that discuss the protection of individuals' personal information and privacy when interacting with AI.

**Deepfake:** Referred to an image or recording that has been convincingly altered and manipulated to misrepresent someone as doing or saying something that was not actually done or said https://www.merriam-webster.com/dictionary/deepfake.

**Digital divide:** Referred to guides that discussed the differences in access to AI tools and the impact on skills, education, opportunities, and the benefits derived from AI-driven innovations.

**Hallucination:** Referred to a plausible but false or misleading response generated by an artificial intelligence algorithm (https://www.merriam-webster.com/dictionary/hallucinati).

**Misinformation:** Referred to incorrect or misleading information https://www.merriam-webster. com/dictionary/misinformation.

**Multiple Libraries:** Referred to multiple guides within the same library system either within the main library or through branches like law, medicine, etc.

**Prompt Design:** Referred to the process of creating prompts that elicit the desired response from language models.

**Racial bias:** Referred to the personal and sometimes unreasoned judgment made solely on an individual's race https://link.springer.com/referenceworkentry/10.1007/978-0-387-79061-9\_329.

**Selection/Training Bias:** Referred to a type of error in which certain elements of a dataset are more heavily weighted and/or represented than others https://www.telusinternational.com/insights/ai-data/article/7-types-of-data-bias-in-machine-learning.

**Stand Alone:** Referred to guides that are independent and not part of a set or series of pages.