

# Artificial Intelligence in Libraries

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#### Abstract

Al powerful tool used for formatting texts and checking grammar (language).

2020's powerful models emerged with potential to be applied in all aspects of human life – education, healthcare and libraries.

In libraries with electronic resources, Time Machine, ChatGPT and Chabot are posed to revolutionize the academic libraries.

How can AI help librarians better meet the needs of 21st century?









#### Brief History

Oxford Dictionary defines Al: A computer system that is able to perform tasks that normally require human intelligence – visual perception, speech recognition, decision making and understanding human language

Al-based Reuse System (AIRS) was introduced in1990's

To enhance LCSH, information retrieval and information sharing.

Protocol Z39.50 for bibliographic information sharing

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#### Brief History Continued

Multiple agents penetrated to enhance reference services, circulation in early 2000's It is 2020's a powerful Al agents e.g. ChatGPT, Chatbot, SIRI, Alexa, smart thermostats to mention a few emerged to send directional responses in libraries.

Directing library patrons to the relevant sources and respond to simple queries Tailored to natural language processing tasks





#### Implications of Al in Libraries

Then, machine learning as well with sound and image recognition techniques used to analyze digital collection.

Al can be integrated into library discovery tools to address patrons' basic information needs. Then, SciGraph can be used to identify unclear relations between concepts, researchers, and institutions.

Librarians have insights of how the patrons search for information, but they lack knowledge about AI among librarians on how to integrate into library system, involving mining tools.



## Implications of Al in Libraries Continued

Al revolutionize numerous library services and process

Technical services, reading habits and search techniques, decision-making methods and information-seeking style

Al can affect negatively library missions, research collaborations, and patrons' expectations.

Librarian have insights into how patrons acquire information; they can enhance their searching skills, and capabilities
Involving data mining tools

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## Challenges to Libraries

Integrating AI in libraries

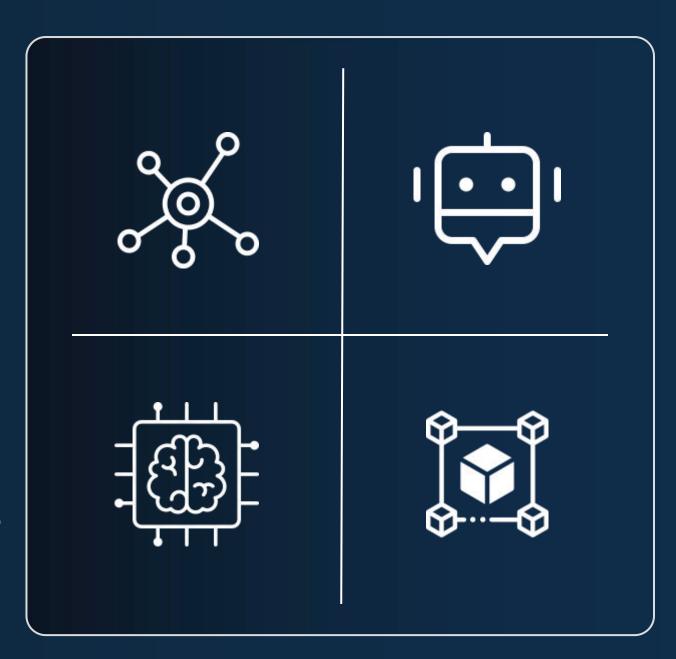
Potential misuse

Disruptions and server failures in information access

Inaccurate query response = Natural language –technical

terms

Al cannot replace librarians in management roles Not easy to change library behaviour from patron centric to patron centred





### Conclusion

Professional are responsible for information literacy, search strategies, techniques, using Boolean operators, truncations for most expected results

Al reduced the value of authenticity of sources

Ethical issues surrounding AI – privacy, bias, discrimination, mental health.

Al is not one technology, but encompasses different agents, each certain role.



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