

Leveraging GIS and ChatGPT for Social Goods and Higher Education

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ABSTRACT

GIS (Geographic Information System) is a powerful tool for managing, analyzing, and presenting spatial data. It has a wide range of applications for social goods, from mapping public services (data) to analyzing the spatial distribution of information resources and use. On the other hand, ChatGPT is an AI-based chatbot that engages in natural language conversations with users. It can be trained to answer questions, provide assistance, and facilitate learning in social services and higher education. Our research combines the two technologies to find innovative and efficient ways of delivering social services and improved LIS education. For example, GIS can map out the locations of library resources, patron demographics, local history, and support other services (i.e., crisis responses). ChatGPT can provide personalized assistance and information to users based on their location and preferences. We intend to use GIS + ChatGPT to create more accessible services/APPs for the underrepresented population in community or higher education. Utilizing GIS and ChatGPT (and other generative AI services) will create more accessible and convenient ways for users to access public data, especially for the seniors and new immigrants in the Great Chicago Area. We will also explore new initiatives to improve the librarian's professional training in "Content Engineering" and "Prompt Engineering" in the era of AI. We will also focus on the ethical implications of these technologies and ensure that they are used to respect user privacy and promote equitable access to quality information services and social justice.

ALISE RESEARCH TAXONOMY TOPICS

Public libraries; Information needs; Artificial intelligence; Data visualization; Curriculum.

AUTHOR KEYWORDS

Geographic Information Systems; ChatGPT; Public Data; Social Goods, LIS Education.

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