

The Promise of ChatGPT as a Tool/Source and its Web Impact



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ABSTRACT: *ChatGPT has emerged as a primary platform in recent months due to its capability of extracting answers to any query or coding requirement in the online platform. Despite the criticism about its functioning, it has penetrated the whole world in a big way. In this work, we studied its web/online impact on different platforms.*

Keywords: ChatGPT, Web Impact, Information Extraction, ChatGPT Metrics

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1. Introduction

Neural networks form the base for the current AI systems, including large language models, machine learning and translation programs or algorithms that produce images. The feature borrowed from the neural network is the brain's visual cortex, where individual cells called neurons pass signals to one another via connections. In the neural network, computing units act as the "neurons" built up in several layers. (1)

Researchers and others have already used ChatGPT and other large language models to produce summaries and talks, document the literature, prepare the draft and standardize papers, detect research gaps, and generate computer code. Besides they also use it to do statistical analyses. (2). ChatGPT is a hype or promising tool being tested now as it profoundly influences users in all respects. It enables the complex analysis of massive data and provides structured responses to any query. Many researchers have recently studied and described its potential as a transformative tool for learning and education. Many assessment studies

conclude that ChatGPT performed differently in many domains, including education, general query, coding and calculations. While ChatGPT is found to be useful for creating instructional content, offering suggestions and acting as an online educator to learners by answering questions and promoting group work, there are many limitations to its application, which tend to produce inaccurate information and circumvent duplicate content (plagiarism) detectors where originality is essential. [3]

2. Web Impact

Web impact studies normally measure the web presence and volume of such presence. They are normally identified through search hits, number of users, rank of the hits, and more. Users and content hosts interested in measuring the impact of specific concepts or documents may find it helpful web impact assessment. For instance, the aim is to assess emerging themes, individuals, or corporations’ influence, spread, or support. In such cases, comparing the web impact of the concepts can be a proxy for their offline impact or a direct measure of web impact.

3. Early Studies

There are concerns regarding the potential misuse of AI Generated Content (AIGC), as it could be employed to generate academic tests and assignments for students and provide tailored responses to coursework questions and assessments. Many universities and colleges have issued a blanket ban on ChatGPT. Researchers (4,5,6,7) have examined the effects of ChatGPT on learning and found that teachers were worried about using it in the classroom.

Regardless of the challenges with ChatGPT, it does provide advantages for healthcare providers in oncology. Amalgamating its ability to deliver information in a summarised, convenient fashion and its competency to capture relevant information, GPT-3 can help save time and resources across the medical setting on a previously unachievable level (8).

Deep learning gives us big potential in the NLP field (9). The machine learning architectures based on transformers have made great progress on many NLP tasks. There are many transformer-based language models, including BERT (10), RoBERTa (11) GPT-2 (12) and XLNet (13).

4. Analysis

Searching for relevant information on Google and other search platforms displays hundreds or thousands of look-alike pages. When we search, for example, for a specific title, several pages of the same topics will be displayed. Files of different volumes will be displayed, making understanding the volume of the content more complex. Web impact assessment evaluates documents or ideas’ “web impact” by measuring how frequently they appear on web pages. The understanding is to provide significance to the documents or ideas that have more impact and are likely to be mentioned more on the web pages. (14) This concept is used earlier from an early work that counted how often prominent academics were mentioned on the web pages and the contexts in which they were mentioned (15)

Platform	No of hits	Type of Data	Hosting
Cornhill Arxiv	815	Full Text	Author-hosting
Semantic Scholar	4740	Abstract	Crawler
Google	69,80,00,000	Hit description	Crawler

Table 1. Web Impact of the Concept/term ChatGPT

We analysed the volume of hits that appear in web platforms for the word ‘chatgpt’ and presented it in the above table. As Cornhill is the full-text web hosting platform, the hits are 815, indicating the volume of the full-text research published on the above theme. Semantic Scholar contains not just journal papers but many other documents. Google is a search engine that captures all possible sources, including HTML pages, blogs, news, reports, opinions, etc.

Google Impact

searching for “chatgpt” in google yielded 69,80,00,000 hits as on 5th July 23

The top 10 hits are

The introducer of Chatgpt the *openai* company. <https://openai.com>

This first is followed by an article in Wikipedia and the apple play store app download site. Later a few technical news sites such as <https://www.techtarget.com>, TechCrunch, India Today, and BBC Science Focus. These sites have a Google page rank of 10 out of 10, making the best web impact.

Google Scholar

When we see google scholar’s impact while searching, it yielded 29,700 results where the top of the hits are the papers published in various journals.

The top 10 are the journal papers published by the below-listed journals and publishers.

1. **BD Lund, T Wang - Library Hi Tech News, 2023 - [emerald.com](https://www.emerald.com)**

... with ChatGPT on its potential impact on academia and libraries. The interview discusses the benefits of ChatGPT ... This section will explore how ChatGPT can be used to improve various ...

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[emerald.com](https://www.emerald.com)

2. **[HTML] [mdpi.com](https://www.mdpi.com)**

[HTML] ChatGPT utility in healthcare education, research, and practice: systematic review on the promising perspectives and valid concerns

M Sallam - Healthcare, 2023 - [mdpi.com](https://www.mdpi.com)

ChatGPT is an artificial intelligence (AI)-based ... aimed to investigate the utility of ChatGPT in health care education, ... research or preprints) that examined ChatGPT in the context of health ...

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[PDF] [researchgate.net](https://www.researchgate.net)

3. What Will the United States Look Like in 2050? A ChatGPT Short Story

RW McGee - A Chatgpt Short Story (April 8, 2023), 2023 - papers.ssrn.com

... In this study, ChatGPT was given a command to write a short story on what the United States will look like in 2050. The resulting short story was well-written, but the content was similar ...

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[PDF] [sfu.ca](https://www.sfu.ca)

4[PDF] ChatGPT: Bullshit spewer or the end of traditional assessments in higher education?

J Rudolph, S Tan, S Tan - Journal of Applied Learning and Teaching, 2023 - journals.sfu.ca

... journal articles to thematise ChatGPT and higher education. We describe ChatGPT’s functionality and ... in higher education in the context of AI chatbots such as ChatGPT? In positioning ...

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Related searches

feasibility of chatgpt utility of chatgpt conversation with chatgpt chatgpt short story chatgpt reply chatgpt in education performance of chatgpt era of chatgpt promise and pitfalls.

[HTML] [springer.com](https://www.springer.com)

5. [HTML] A conversation on artificial intelligence, chatbots, and plagiarism in higher education

MR King, ChatGPT - Cellular and Molecular Bioengineering, 2023 - Springer

... With its advanced capabilities, ChatGPT is revolutionizing ... College students could potentially use ChatGPT to cheat on ... integrity and to avoid using ChatGPT or any other technology ...

Save Cite Cited by 117 Related articles All 2 versions

[PDF] arxiv.org

6. ChatGPT: The end of online exam integrity?

T Susnjak - arXiv preprint arXiv:2212.09292, 2022 - arxiv.org

... Abstract This study evaluated the ability of ChatGPT, a recently developed artificial ... use of ChatGPT as a tool for academic misconduct in online exams. The study found that ChatGPT is ...

Save Cite Cited by 118 Related articles All 2 versions

[HTML] [science.org](https://www.science.org)

7. ChatGPT is fun, but not an author

HH Thorp - Science, 2023 - [science.org](https://www.science.org)

... of ChatGPT on writing scientific papers. In a recent study, abstracts created by ChatGPT were ... And no, although surely ChatGPT could write a better manuscript than I will, ChatGPT is for ...

Save Cite Cited by 301 Related articles All 6 versions

[HTML] [nature.com](https://www.nature.com)

8.[HTML] ChatGPT: five priorities for research

EAM Van Dis, J Bollen, W Zuidema, R van Rooij... - Nature, 2023 - nature.com

... A smartphone with the AI ChatGPT service down notification, and a laptop screen with ChatGPT home page developed by OpenAI. ... We presented ChatGPT with a series of ...

Save Cite Cited by 305 Related articles All 8 versions

[PDF] [thelancet.com](https://www.thelancet.com)

9. Generating scholarly content with ChatGPT: ethical challenges for medical publishing

M Liebreuz, R Schleifer, A Buadze, D Bhugra... - The Lancet Digital ..., 2023 - thelancet.com

... Resultantly, individuals have reportedly used ChatGPT to ... that ChatGPT write a Comment for The Lancet Digital Health about AI and medical publishing ethics. We then asked ChatGPT ...

Save Cite Cited by 106 Related articles All 5 versions

[PDF] [edarxiv.org](https://www.edarxiv.org)

10. ChatGPT for good? On opportunities and challenges of large language models for education

E Kasneci, K Seßler, S Küchemann, M Bannert... - Learning and Individual ..., 2023 - Elsevier

Large language models represent a significant advancement in the field of AI. The underlying technology is key to further innovations and, despite critical views and even bans within ...

Save Cite Cited by 170 Related articles All 10 versions

Table 2. Google Scholar Hits for ChatGPT

In Table 2 above, the retrieved hits with title, author, brief sentences about the abstract, and citations are available. Also, the related items are directed by google scholar, making it a comprehensive search tool.

5. Discussions and Summary

We have analysed the various web impact of the important evolution of ChatGPT in many approaches and searches. We found that Google has retrieved many irrelevant hits, not the core retrieval. As an academic search engine, Semantic Scholar has given more relevant items. Cornhill Archives, an open-source full-text archive, can produce more than 800 core research papers. The indexing followed by Cornhill is more accurate and positively impacts users.

Future studies of the web impact of a concept or phenomenon will play a crucial role in determining scientific value and outreach to the users.

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