# Chapter 7 The Impact of Artificial Intelligence on Search Engine: Super Intelligence in Artificial Intelligence (AI)

### Jana Saab

Lebanese University, Lebanon

### **ABSTRACT**

In an aim to improve search engine results, AI interferes to boost it. Thus, this chapter investigates the impact of artificial intelligence on search engine. It includes the most advanced techniques of artificial intelligence that improve search engine optimization (SEO) rankings. In order not to fall in the hassle of having no ranking for your website, artificial intelligence can uplift a website position in the search engine. It is important to state that the growth of SEO has an integral role in digital marketing through AI. Moreover, the obtained results in research studies approve that the integration of artificial intelligence is vital for the progress of search engines.

### INTRODUCTION

In the era of technology, the rise of AI has gained an important position. Indeed, artificial intelligence is transforming the world into a more digital one. Furthermore, artificial intelligence is used in various domains in life (Mohapatra et al., 2018). In fact, search engines are powered by artificial intelligence. A question is raised here, are you running your business, and you want your brand to standout in the digital world? Then, artificial intelligence can do it all.

Whether your aim is to search for a product or to search for anything you need, the search engine can offer you everything with one click. Additionally, the advancement of search engine optimization (SEO) enables a website rank higher in search engine. To add more, the growth of AI has positively influenced search engine. The use of highly ranked keywords strengthens your content (Mohapatra et al., 2018). Besides, artificial intelligence has an integral role in increasing a content visibility. Thus, companies will get high conversions. To add more, users can find all their answers on the search engine.

DOI: 10.4018/978-1-6684-6937-8.ch007

Moreover, Artificial Intelligence helps you rank algorithms (Nick, 2021). Therefore, search engines can work better and in a more advanced way.

Furthermore, users' search has an important role in ranking algorithms. Therefore, this allows a website in the search engines. To add more, artificial intelligence is significant in enabling search engines understand languages (Nick, 2021). Additionally, artificial intelligence elevated search engines and grants them the chance to be the keys to get all answers for everything. Not only do users search for texts, but they also search for images. This is a stunning creation by AI!

The influence of artificial intelligence on search engines lies in the progress of businesses. For example, clickable Ads ranks can boost a business leads. Thus, in order to rank high at the top of the search, you have to implement the most convenient content (Nick, 2021). In this case, AI can uplift search engines and lets a website standout. All in all, the main aim is to embrace the main influences of Artificial Intelligence on Search Engine. Also, the way search engines can boost websites based on researches and studies. Highlighting the main issues that make a drastic change from the traditional ways into the modern ones will enhance SEO.

Therefore, the chapter is divided into several sections. To begin with, section 1 includes a background about artificial intelligence (AI) and Natural Language Processing (NLP). Section 2 investigates search engine and information retrieval. Indeed, section 3 involves artificial intelligence in contribution to SEO. Moreover, section 4 manifests crawling, indexing, and ranking in the search engine. Additionally, section 5 elaborates about the importance of evaluating search engine. Lastly, there is a conclusion that sums up the whole chapter and recommendations for further research.

### **BACKGROUND**

## 1. What Is Artificial Intelligence (AI)?

The term "Artificial Intelligence" is mainly associated with the intelligent tasks that a computer does. Artificial intelligence (AI) is known as a machine that is able to understand the human language (Ertel, 2017). Additionally, it can solve many problems in computers. Specifically, it has solutions for many problems associated with human language. Artificial intelligence enables computers to work similar to the level of humans and even higher than that; in other words, it surpasses human beings. To add more, "autonomous robots" is an integral part of AI (Ertel, 2017).

Additionally, Rich indicates that the high intelligence of machine lies in its knowledge in the top linguistic level, mainly pragmatics. To specify more, it can excel in the understanding of a sentence beyond the literal meaning (Ertel, 2017). In addition, it is capable of controlling data of all types and solving any problem (Copeland, 2022). Through artificial intelligence, a computer can get big data in order to be analyzed and manipulated (Copeland, 2022). To add more, the escalating of World Wide Web paves the way for artificial intelligence to operate data (Tecuci, 2012).

It is said that "Much of the power of an intelligent agent derives from the knowledge in its knowledge base. A main goal of the knowledge acquisition and machine learning research is precisely to enable an agent to acquire or learn this knowledge from a user, from input data, or from agent's own problemsolving experience" (Tecuci, 2012, p. 8). It is noteworthy to say that Natural Language Processing is a part of Artificial Intelligence that has a great role in the progress of search engine (Copeland, 2022).

18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-impact-of-artificial-intelligence-on-searchengine/318063

### Related Content

### Context-Awareness in Ambient Intelligence

Declan Traynor, Ermai Xieand Kevin Curran (2010). *International Journal of Ambient Computing and Intelligence (pp. 13-23).* 

www.irma-international.org/article/context-awareness-ambient-intelligence/40347

### Ghost Kitchens Transforming the Culinary Landscape and Shaping the Future of Food Delivery

S. Baranidharan, David Winster Praveenraj, K. Dhanalakshmi, Joji Chandran, D. Sandhya, Rahul R. Kurupand Chippy Mohan (2025). *Impact of AI and the Evolution of Future Ghost Kitchens (pp. 143-166).* www.irma-international.org/chapter/ghost-kitchens-transforming-the-culinary-landscape-and-shaping-the-future-of-food-delivery/375401

### PCA as Dimensionality Reduction for Large-Scale Image Retrieval Systems

Mohammed Amin Belarbi, Saïd Mahmoudiand Ghalem Belalem (2017). *International Journal of Ambient Computing and Intelligence (pp. 45-58).* 

www.irma-international.org/article/pca-as-dimensionality-reduction-for-large-scale-image-retrieval-systems/187067

### Ethical and Privacy Considerations in Al-Driven AD Research

Mohammed Abdul Matheen, Zainulabedin Hasan, Amairullah Khan Lodhi, Shaikh Abdul Waheedand Altaf C. (2024). *Al-Driven Alzheimer's Disease Detection and Prediction (pp. 403-418).* 

www.irma-international.org/chapter/ethical-and-privacy-considerations-in-ai-driven-ad-research/353428

# The Employment Status and Support Needs of Persons with Disabilities in Japan: An Analysis of Narrative using Narratology and Text Mining on a National Survey

Kai Seino, Yuichiro Harunaand Shun Ishizaki (2016). *Computational and Cognitive Approaches to Narratology (pp. 245-275).* 

www.irma-international.org/chapter/the-employment-status-and-support-needs-of-persons-with-disabilities-in-japan/159628