ملخص البحث رقم (٤)

ملخصات الأبحاث المقدمة من الدكتورة / هالة عبدالحميد مصطفى للترقية الى درجة استاذ مساعد

تخصص نظم المعلومات والمقدمة إلى اللجنة العلمية الدائمة للحاسبات و المعلومات

English Title	Artificial Intelligence: What it Was, and What it Should Be?
Journal/Conference **Volume/Issue** **DOI**	Journal of Theoretical and Applied Information Technology. Volume 11 Issue 6, 2020. **DOI : 10.14569/IJACSA.2020.0110609** Indexing: Web of Science- Scopus Q3 ISSN/ISBN: 2156-5570 (Online) 2158-107X (Print)
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Year	2020
Derived from supervised M.Sc. /Ph.D. Thesis?	No
English Abstract	Artificial Intelligence was embraced as an idea of simulating unique abilities of humans, such as thinking, self-improvement, and expressing their feelings using different languages. The idea of "Programs with Common Sense" was the main and central goal of Classical AI; it was, mainly built around an internal, updatable cognitive model of the world. But, now almost all the proposed models and approaches lacked reasoning and cognitive models and have been transferred to be more data driven. In this paper, different approaches and techniques of AI are reviewed, specifying how these approaches strayed from the main goal of Classical AI, and emphasizing how to return to its main objective. Additionally, most of the terms and concepts used in this field such as Machine Learning, Neural Networks and Deep Learning are highlighted. Moreover, the relations among these terms are determined, trying to remove mysterious and ambiguities around them. The transition from the Classical AI to Neuro-Symbolic AI and the need for new Cognitive-based models are also explained and discussed.