### **CALL FOR PAPERS**

A SPECIAL ISSUE of the Journal Machine Learning with Applications (by Elsevier) on

# ChatGPT and Similar AI Tools: Their Potential and Challenges in Today's World

#### **GUEST EDITORS:**

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#### **SCOPE:**

The recent publicity around the ChatGPT tool ( <a href="https://en.wikipedia.org/wiki/ChatGPT">https://en.wikipedia.org/wiki/ChatGPT</a> ), developed by the OpenAI company (<a href="https://en.wikipedia.org/wiki/OpenAI">https://en.wikipedia.org/wiki/OpenAI</a> ), has already attracted the attention of many people from the scientific, academic and industry sectors. It has also captivated the general public. As is usually the case in such situations, some of the initial understanding of what ChatGPT and similar AI tools can or cannot achieve, can be potentially grossly inaccurate. However, if one aspect seems to be certain, is that this is the dawn of a new era of the use of AI techniques and in particular of machine learning and large language modeling based approaches.

As the journal of Machine Learning with Applications (MLWA) by Elsevier focuses on all the aspects related to the creation and application of machine learning based approaches, this Special Issue inspires to provide a holistic understanding of what ChatGPT and similar AI tools can or cannot achieve. What opportunities for improvement and application exist and what their limitations can be, both methodologically but also in terms of current laws, regulations, and ethics.

Although the journal Machine Learning with Applications is an Open Access journal, publication fees will be waived for the articles published in this Special Issue. More on the MLWA journal can be found at: <a href="https://www.sciencedirect.com/journal/machine-learning-with-applications">https://www.sciencedirect.com/journal/machine-learning-with-applications</a>

This Special Issue invites papers describing algorithmic aspects related to the enhancement of existing approaches and also to the development of totally new approaches that aim at similar goals as those of ChatGPT and other related AI tools. Of interest are also application papers in all domains of modern society. Therefore, topics of interest include, but are not limited to:

- Theoretical issues related to the development of large language models.
- Algorithmic issues related to the use of machine learning for the development of chatbots.
- Application opportunities and challenges of the use of such tools in healthcare and medicine.
- Application opportunities and challenges of the use of such tools in industry.
- Application opportunities and challenges of the use of such tools in science.

- Application opportunities and challenges of the use of such tools for national security.
- Legal issues related to the use of such technologies.
- Algorithmic challenges while developing such technologies.
- How the future may look like in these areas after 5, 10 or 20 years.

## **IMPORTANT DATES:**

Submission deadline: May 30, 2023 Notification of first round of review results: July 30, 2023

Submission of revised papers: September 30, 2023
Notification of second round of review results: October 30, 2023
Final decisions notifications: November 15, 2023

#### **SUBMISSION OF MANUSCRIPTS:**

Please submit your manuscript before the submission deadline.

All submitted manuscripts will be subjected to the same rigorous peer review process as regular submissions to the MLWA journal. Once your manuscript is accepted, it will go into production, and it will be simultaneously published in the current regular issue of the MLWA journal and pulled into the online Special Issue on this topic. Articles from this Special Issue will appear in different regular issues of the journal, though they will be clearly marked as Special Issue articles.

Please make sure you have read the Guide for Authors available at the Website of the MLWA journal before submitting your manuscript. These guidelines can also be accessed at: <a href="https://www.elsevier.com/journals/machine-learning-with-applications/2666-8270/guide-for-authors">https://www.elsevier.com/journals/machine-learning-with-applications/2666-8270/guide-for-authors</a>

In your cover letter clearly indicate that your submitted manuscript is for this Special Issue. The submission link is: <a href="https://www.editorialmanager.com/mlwa/default.aspx">https://www.editorialmanager.com/mlwa/default.aspx</a> When submitting the paper, please select "VSI: ChatGPT & Similar Tools" as the article type.

The URL with this Call for Papers can be found at:

https://www.sciencedirect.com/journal/machine-learning-with-applications/about/call-for-papers#chatgpt-and-similar-ai-tools-their-potential-and-challenges-in-today-s-world

For further information or clarifications about this Call for Papers, please do not hesitate to contact this Special Issue's Editors directly.

Please kindly send a quick email to Dr. Triantaphyllou at <a href="mailto:etriantaphyllou@yahoo.com">etriantaphyllou@yahoo.com</a> with a preliminary article title as soon as possible.