

JOURNAL OF SPATIAL INFORMATION SCIENCE Number 28 (2024), p. 1

Editorial

## Research articles in the GPT era

As a journal, we are proud of Matt Duckham's vision of a community-led, open access journal for Spatial Information Science. That vision has some important cornerstones: that all papers are open access; that there are no charges for publication enabling anyone to publish in *JOSIS* regardless of their access to funds; and, that we remain community led, without the need to consider commercial interests.

These principles come with some costs. All of the infrastructure behind *JOSIS* is run on a shoestring, and as editors we are not only responsible for shepherding papers through the review process, but also for the myriad hidden tasks involved in typesetting and publishing papers. One way of streamlining the process somewhat is moving from considering final accepted manuscripts in Word or Latex to only Latex file format. Although we are aware that there is a learning curve to using Latex, the availability of an Overleaf template makes this much less daunting than in the past. To make this transition easier, we are moving to consider initial submissions in any format, but will ask authors to agree to submit a Latex version should their papers be accepted.

A second, and in many ways more existential challenge concerns the widespread adoption of large language models—or more informally, generative AI—such as ChatGPT and Perplexity, by increasing numbers of authors as writing tools. Many journals are now being confronted with the reality of scholarly written work involving the use of such technologies in their creation [2]. More concerning than simple stylistic changes, such as word choice, is the potential for these models to generate factually inaccurate content, including citing nonexistent research literature. In addition, the risks of "accidental" plagiarism and copyright infringements are real.

A more subtle issue is the notion of scholarly work as a unique, creative expression of researchers' thinking. The common saying that "writing is thinking" is, we think, highly pertinent to this debate. Our field is struggling to find reviewers for the deluge of articles being submitted to journals, and reviewers in turn have less and less time to review. Time savings, through the use of new tools to accelerate writing, will only exacerbate this problem.

An important counter-argument is the leveling of the playing field for those whose first language is not English. If tools like ChatGPT really helped reduce inequalities in publishing, especially with respect to the underrepresented global south, then we would be on board too. But, at least for now, a much more likely path appears to be that even more papers are produced by already productive groups.

For *JOSIS*, the potential benefits of publishing work that has involved the use of generative language tools in their writing, do not outweigh the risks at this stage. Therefore, in line with publications such as *Science*, we are instituting a policy that submissions must be written entirely by the authors without the help of AI writing tools, except for minor improvement of grammar [3]. On submitting, we will ask authors to confirm this, and we

trust that they will do so. At the same time, we want to assure authors that language alone will not be a reason that *JOSIS* rejects papers. Rather, we will work with you to edit your paper if reviewers agree that the core scientific ideas meet our review criteria. So, along with introducing a policy on the use of generative intelligence, we will also change our review guidelines to explicitly ask reviewers to comment only on English language in so far as it hinders understanding.

Of course, some argue that a policy on the use of AI is unenforceable [1]. This may be true, but our policy aims to signal a standard for behavior. Our vision of *JOSIS* is as an alternative model for publishing that focuses on quality over quantity research and has space for everyone's work, independent of their access to resources.

> Benjamin Adams University of Canterbury, New Zealand

Somayeh Dodge University of California, Santa Barbara, USA

> Ross Purves University of Zurich, Switzerland

## References

- HOSSEINI, M., RESNIK, D. B., AND HOLMES, K. The ethics of disclosing the use of artificial intelligence tools in writing scholarly manuscripts. *Research Ethics* 19, 4 (2023), 449–465.
- [2] LUND, B. D., WANG, T., MANNURU, N. R., NIE, B., SHIMRAY, S., AND WANG, Z. ChatGPT and a new academic reality: Artificial intelligence-written research papers and the ethics of the large language models in scholarly publishing. *Journal of the Association for Information Science and Technology* 74, 5 (2023), 570–581.
- [3] THORP, H. H. ChatGPT is fun, but not an author. Science 379, 6630 (2023), 313–313.