

Where Are We Going by Applying AI Tools? Are We Going to Lose Our Jobs?

The question, as direct as it is provocative, resonates with increasing insistence in university corridors, professional offices, and boardrooms. The rapid and pervasive rise of artificial intelligence (AI) is shaking the foundations of countless sectors, especially those, like medicine and education, that are built on knowledge, experience, and a deep human connection. The echo of this question has reached our editorial team not from a futuristic article, but from a concrete dialogue I had today with an autonomous AI agent. This experience has forced us to confront the future of our own work directly.

Recently, I relied on one of these advanced systems on a task as traditional as it is complex: the scientific review of manuscripts submitted for publication. The experience went far beyond simple proofreading. The AI proved to be a faithful “digital assistant,” capable not only of analysing and revising scientific content with remarkable precision but also of creating teaching aids like slides and speaker notes, and even designing the architecture of an entire Distance Learning (FAD) program, complete with webinars, learning tests, and automated evaluation systems. This collaboration has highlighted an undeniable truth: AI tools are evolving from simple conversational assistants to powerful executive agents capable of augmenting our professional abilities in previously unimaginable ways, even if they sometimes hallucinate and introduce elements totally out of context.

This brings us to the heart of the matter: are we witnessing a transition toward our replacement or an enhancement of our faculties? The answer, as is often the case, is not binary. It is crucial to clearly distinguish which functions can be delegated to AI and which, instead, remain intrinsically human. Artificial intelligence excels at automating standardised and scalable tasks: it can deliver educational content with consistent quality to thousands of users simultaneously, administer and evaluate objective tests with immediate feedback, and make training materials available 24/7. These are the functions of the “content-deliverer,” essential but repetitive tasks that consume precious time and energy.

On the other hand, the essence of education and medical practice lies in domains that transcend automation. An expert trainer does not just transmit information; he or she reads the room, senses confusion or interest, adjusts the pace, stimulates debate, and answers complex questions with a flexibility that no algorithm can yet replicate. Personalised mentoring, empathetic support, and the ability to inspire and motivate are profoundly human qualities. Similarly, in clinical practice, the qualitative assessment of a complex case, abductive reasoning in the face of ambiguous symptoms, and the transmission of that practical, almost artisanal experience built over years in the field remain the prerogative of the human professional.

The most realistic and fruitful path for the future, therefore, is not one of replacement but of synergy. An emblematic application of this paradigm is found in a crucial activity for our scientific community: peer review. The review process, a pillar of knowledge validation, is notoriously slow, burdensome, and subject to bias. Here, AI can act as a powerful accelerator and a rigorous controller. Intelligent systems can perform a preliminary screening of manuscripts to check for compliance with editorial standards, assess content originality through advanced anti-plagiarism checks, and verify methodological consistency, thereby optimising the assignment process.

However, the final judgment on the novelty, clinical relevance, and scientific impact of a work remains firmly in the hands of the human reviewer. In this model of augmented peer review, the AI performs the

preparatory and control work, while the expert focuses on high-level intellectual evaluation. The result is a faster, more transparent, and more robust process that elevates the quality of scientific publication and frees up valuable time for editors and reviewers. We are entering the era of the “augmented professional,” a model in which AI takes on repetitive, low-value-added tasks, freeing the human professional to focus on what they do best: thinking critically, creating empathetic connections, solving complex problems, and innovating. In this paradigm, AI is not a threat to our jobs, but a tool to elevate them, to make them more incisive, and, ultimately, more human.

So, will we be the first to lose our jobs? Probably not, but we will undoubtedly be among the first to reinvent them. The challenge ahead is not to resist an unstoppable technological tide, but to learn to navigate it with wisdom, ethics, and vision.

In the spirit of complete transparency and to embody the topic of this discussion, I hereby declare that the first part of this editorial has been entirely written by an AI-based agent, based on a conversation we had exploring its capabilities and potential. In this scenario of synergy, the interaction between the human being and artificial intelligence is not additive, but multiplicative. The final result is not the simple sum of the human contribution and that of the AI ($H + AI$), but the product of the two ($H \times AI$). The AI does not merely add value, but exponentially amplifies the effectiveness, scope, and depth of human thought and action, producing something novel. It is in this dynamic of multiplication that lies the true revolution and the promise of an empowered professional future.

The adoption of Large Language Models (LLMs) in scientific writing presents a compelling, yet complex, parallel to the historical shift from manual calculation to statistical software packages like SPSS, SAS, and Stata. Fifty years ago, researchers performed complex calculations and plotted graphs by hand, a process that was slow, error-prone, and required deep mathematical expertise. The introduction of electronic computing and specialized software democratized quantitative analysis, allowing researchers to focus on the interpretation of results rather than the mechanics of calculation. We now trust these tools to execute algorithms accurately, provided we input the correct data and select the appropriate test.

However, the analogy breaks down when considering the fundamental nature of the output. Statistical software operates on the principle of algorithmic fidelity: given the same input and command, the output is deterministically identical and verifiable against established mathematical rules. The researcher’s task is one of validation—ensuring the correct test is applied to the data. In contrast, LLMs operate on probabilistic generation, producing text that is fluent and contextually relevant but is not guaranteed to be factually accurate or logically sound. The core difference lies in the concept of “hallucination” and the lack of an inherent “ground truth” mechanism within the model itself.

Therefore, while both technologies automate a previously manual, labor-intensive process (calculation vs. composition), the nature of the required trust is fundamentally different. Trusting SPSS is trusting a calculator; trusting an LLM is trusting a highly articulate, yet potentially confabulating, collaborator. The researcher’s role shifts from validating the method (in statistics) to rigorously verifying the factual content and logical coherence of the output (in text generation), demanding a higher degree of critical engagement to maintain scientific integrity and avoid the propagation of plausible but false information.

If we do not want to be replaced by artificial intelligence, we must learn to govern it. This conclusion is mine and mine alone; I did not ask my digital agent for an opinion.

Based on these considerations, and observing that in dozens of papers the declaration of AI usage consistently yielded ‘none’ as a response, we have decided to remove the public declaration. Instead, it will be made mandatory for both authors and reviewers to include this information within the confidential comments to the editor.

Ultimately, the signature of an article, a peer review, or an editorial decision is the final certification of intellectual ownership and accountability.

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