



Inflation?

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Published online: 21 November 2022

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Dear readers,

while we all listen to stories on TV and radio shows about the state of our economy and inflation worldwide, some of us find peace of mind at our workplace, giving us stability in an ever-changing world. We might get a different view on the matter when looking at the change in the total number of AI publications over the past decade. The total number of AI publications doubled since 2010, growing from 162,444 in 2010 to 334,497 in 2021. The steepest increase happened in the past five years, between 2017 and 2021. The numbers were published in the 2022 AI Index Report, which is an independent initiative at the Stanford Institute for Human-Centered Artificial Intelligence (HAI), led by the AI Index Steering Committee, an interdisciplinary group of experts from across academia and industry. The annual report tracks, collates, distills, and visualizes data relating to artificial intelligence, enabling decision-makers to take meaningful action to advance AI responsibly and ethically with society in mind.¹

The report also shows the type of publications: in 2021, more than 50% of the published AI articles were published

in AI journals, and just above 20% were published in conference proceedings. This is a change from ten years ago when journals and conference papers were more or less equally distributed with $\approx 43\%/41\%$. In fact, while journal publications have grown 2.5 times and repository publications have grown 30 times, conference publications have declined since 2018. The interested reader might now reflect and argue that attendance at large conferences in the field such as AAMAS, IROS, ICML, and NeurIPS among others has increased drastically in the past few years. And they are correct: the attendance at ICML exploded to 29,500 participants last year, up from about 2500 in 2017. Wow! If there is a 10-fold increase in attendance how come we have a decline in the number of conference papers? While we might not be able to solve this problem with a proper justification, one explanation can be the sharp increase in repository papers (together with the stated increase in journal papers).

Let's discuss whether this international trend is also visible nationally. With respect to sheer numbers, our German Journal of Artificial Intelligence—which follows a twofold purpose to be a platform for the German AI community and to provide insightful research—has not seen the same increase in AI publications. One reason might be the journal's format: inviting guest editors with special trendy topics rather than being assertive for a large number of free articles. Analyzing the situation in Germany a little further by including the national AI conference we see a trend that is in line with the numbers from the AI Index Report: a decline in papers at our national AI conference. Contrary to the international trend of having an increase or at least a consolidation of attendance we see a decline in attendance nationally. We have a similar observation for board or committee attendance such as the Artificial Intelligence Section within the German Informatics Society. One can argue—if self-criticism is allowed here—whether this body really is the host of all activities that are related to Artificial Intelligence or some of its subfields in Germany.

And all this happens at a time when the German government invests heavily in AI. Even though we are only at the

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¹ <https://aiindex.stanford.edu/report/>.

beginning of this investment we already see a steady change: the number of AI professorships, for example, has increased to 220 employing 1,800 scientists. Those numbers come from a fairly recent Bitkom study² and would suggest an increase in the numbers of AI publications and an increase in attendance of the German AI conference. Reality gives us a different story. So, where do we publish our papers? What conferences are we attending? Top-tier conferences are often a priority and so are top-tier journals. Is there a trend similar to what is experienced in the US? Is there inflation starting regarding the number of papers in journals? I.e., does a typical assistant professor have to write more journal papers in high-impact journals to get tenure compared to ten years ago? I certainly would be interested to get answers to these questions.

Our German Journal of Artificial Intelligence is now in its 36th year and I would like to remind ourselves that it is worth having a journal like ours, a journal that features modern AI trends in special issues that a researcher can take as a starting point to get familiar with a topic by studying technical articles, project reports, interviews with highly respected scientists in the field and controversial discussion papers. It is worth sending papers to this journal which is one of the fastest turnarounds for publication. The median from submitting an article to the first decision is 77 days. It

is also worth having an AI research community within the country that has a decent attendance at its annual conference. It could be used to catalyze ideas for future Collaborative Research Centers (SFBs) or Priority Programs (SPPs). Why don't we make an effort?

The editors of *Künstliche Intelligenz* decided to devote this special issue to eXplainable AI, which aims at allowing humans to comprehend and possibly control machine-learned (ML) models and other complex AI systems. Our guest editors Profs Ute Schmid and Britta Wrede did a marvelous job composing a double special issue for XAI. A big “thank you” from the editors of our journal. And now it is time to wish you a pleasant reading with the new issue of *Künstliche Intelligenz*—eXplainable AI!

Kind regards,



² https://www.bitkom.org/sites/main/files/2020-07/200731_impulspapier_ki-forschung.pdf.