

Mission & Scope

The journal of artificial intelligence (JAI) welcomes papers on broad AI topics that represent advancements in the field as a whole, such as but not limited to cognition and AI, automated reasoning and inference, case-based reasoning, common sense reasoning, computer vision, constraint processing, ethical AI, heuristic search, human interfaces, intelligent robotics, knowledge representation, machine learning, multi-agent systems, natural language processing, planning and scheduling, and planning and scheduling algorithms. The journal publishes on successes as well as suggestions for novel approaches to AI issues, both of which must include arguments for their utility and efficacy.

The focus of papers reporting applications of AI should be on how new and novel AI approaches improve performance in application domains rather than a presentation of yet another application of standard AI methods. Articles detailing applications of AI are also encouraged. Applications papers should outline a sound solution, highlight its uniqueness, and provide a thorough analysis of the underlying AI methods.

The journal also welcomes Research Notes, Research Area Reviews, Position Papers, and Book Reviews in addition to Regular Articles (see details below). The journal will also take into account summary pieces that discuss difficulties and contests from diverse branches of AI. Such papers should focus on discoveries that are useful outside of the competition (series) itself, while still motivating and describing the competition design as well as reporting and interpreting competition results.

Types of Papers

1. Ordinary Papers

The JAI encourages basic and applied papers describing mature, finished, and original research that explains how to create artificial intelligence and other intelligent systems. Reviewers and editors ultimately decide if an article is mature, complete, and novel on a case-by-case basis. In general, a paper should have a strong justification, articulate the relevance of the research to AI, explain what is new and different, foresee the scientific impact of the work, include all pertinent proofs and/or experimental data, and provide a thorough discussion of connections with the body of literature. The results that a paper reports must not have been previously published by the same authors or by any other authors in any archive publication. This is a requirement for a paper to be considered novel.

The length of submitted manuscripts is 6-14 pages.

2. Analysis Notes

Short communications that don't fit in with the other article types will have a place in the Journal of Artificial Intelligence's Research Notes section. A maximum of 4500 words should be used (typically a paper with 5 to 14 pages). These are a few good research note examples, however there are more as well: An erratum note that addresses and revises earlier results published in the journal; clear and intensely focused technical research directed at other specialists; an extension or addendum to an earlier published paper that presents additional experimental or theoretical conclusions.

3. Reviews

The JAI puts a lot of effort into evaluating and publishing academic papers that offer thorough and ethical reviews of significant existing and emerging research areas. The JAI anticipates thorough

coverage of an established or emerging research area, as well as the formulation of a comprehensive framework that highlights the significance of previous findings and synthesises an opinion on the potential importance and future directions of the field. It is insufficient to provide a list of articles in a field along with a synopsis of their contributions. A field review essay must, in general, offer a scholarly summary that aids in a more thorough comprehension of a research area. The choice of the work to be included in a field article should be made using well-defined, rational criteria that are accepted by the relevant AI research community; it should be free of any personal or peculiar prejudice.

4. Papers for contests

AI systems are currently engaged in well-established competitions (e.g. in speech and language, planning, auctions, games, to name a few). The systems entered in these competitions regularly have their related scientific contributions submitted as research papers to conferences and journals. Finding appropriate venues for papers outlining the goals, outcomes, and key innovations of a competition, however, has proven to be more challenging. The category of competition summary papers has been established by JAI with this objective in mind.