
ARTIFICIAL INTELLIGENCE JOURNAL

REPORT TO THE EDITORIAL BOARD

July 2009

Tony Cohn and Ray Perrault
Editors in Chief

SUMMARY

This is a report on the state of the AI Journal (AIJ) as of the end of 2008 presented to the board at its meeting in Pasadena, California on July 14, 2009. Although the number of submissions decreased slightly from 2007, AIJ saw significant increases in impact factor, paper downloads at ScienceDirect, as well as a continued decrease in the mean time to first decision which is now at 73 days.

PUBLISHED ARTICLES

As shown in Figure 1, the number of regular and articles was about the same as in 2007, with a decrease in the number of special issue articles.

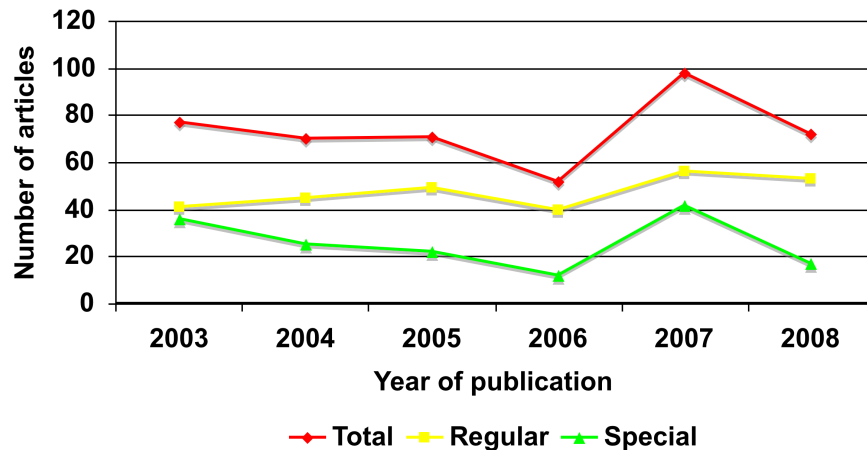


Figure 1. Published articles.

REGULAR SUBMISSIONS

Table 1 shows the recent history of submissions to AIJ. Each column shows the status of regular papers submitted in that calendar year. 2009 figures are up to June 1. The Gross Acceptance figure is the portion of decided papers accepted so far for that year. The Expected Acceptance figure is based on our history of acceptance of revised papers.

Submissions for 2008 show a slight decrease from 2007 and the acceptance rate appears to be going down from the roughly 30% which it has been for several years. We go into why this may be later.

SPECIAL ISSUES

As well as our annual review issue in December, we published one special issue with 11 papers in 2008, on Advances in Plan Generation, edited by Maria Fox and Sylvie Thiebaux.

READERSHIP AND IMPACT

AIJ's ISI 2-year impact factor was 3.4, 7th in 2008 among Computer Science and AI journals. This is compared to 3.0 and 6th in 2007. The only journals with higher impact factors are in the areas of vision and image processing, evolutionary computing and neural networks. As a "journal of record" its cited half-life continues to be at the very top, greater than 10 years. Although we are very happy with these numbers, in terms of attracting submissions, we believe that quick and thorough reviewing, and open access, are at least as important to authors as impact factor.

Figure 2 shows the number of downloads of AIJ papers on Elsevier's distribution platform, ScienceDirect. ScienceDirect is now available in over 4,000 institutions worldwide, where an institution can be a single library, or an entire country. These numbers must, however, be interpreted carefully. Elsevier allows subscribers to choose whether the downloads from their institutions should appear in published numbers or not. Before 2007, most download statistics from China were not published.

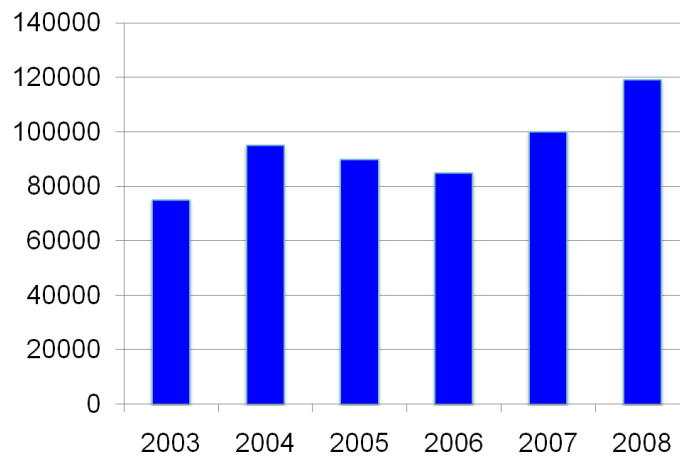


Figure 2. AIJ downloads on ScienceDirect.

SUBMISSIONS AND DECISIONS

Figure 3 estimates the geographic distribution of published papers, by year of submission. Papers are assigned to the country of the corresponding author, when known. The year 2008 saw a significant increase in published papers from Europe and a roughly constant rate from North America. These two areas still account for about 80% of all published papers, with a decrease increase in acceptances of papers from Asia (including China), and an increase in acceptances from “Rest of the World”, including Israel.

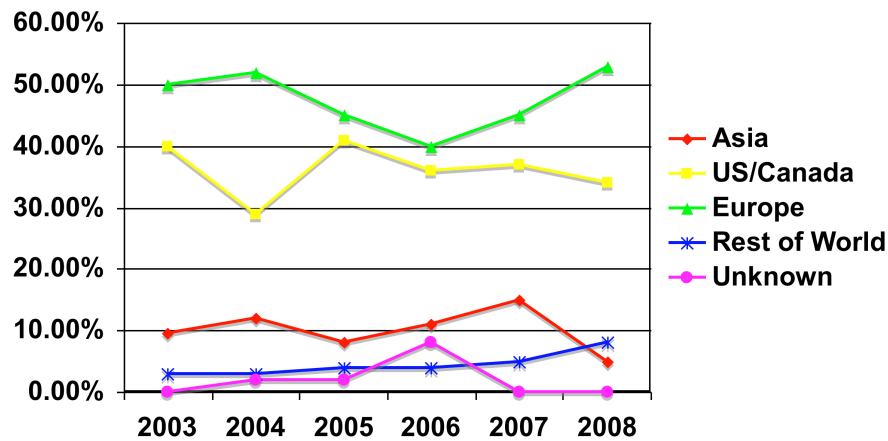


Figure 3. Geographic distribution of corresponding authors of published papers.

Acceptance rates continue to be much higher for papers from Europe and USA/Canada, as shown in Figure 4, even though submissions from Asia (including China) now exceed those from USA/Canada.

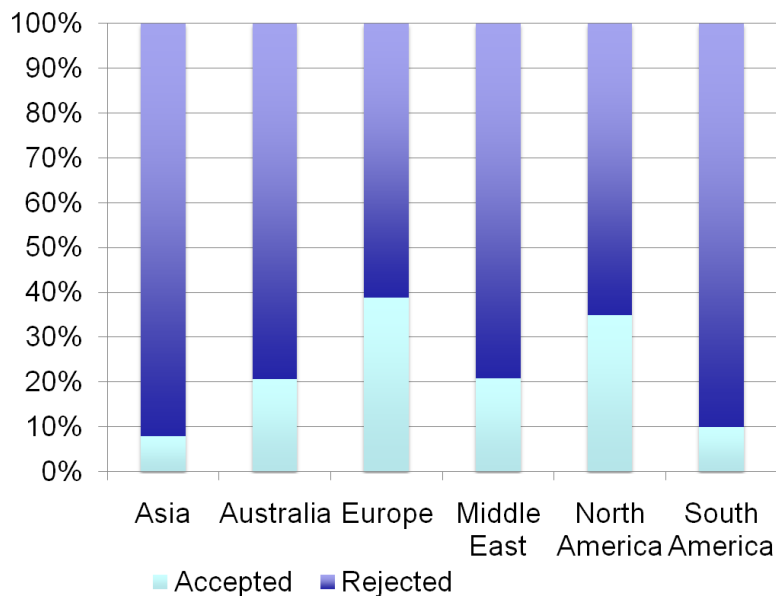


Figure 4. Decisions by geographical area for 2004-2008.

Figure 5 shows a 3-year rolling average of submissions since 2005 by major topic area. The core areas of Knowledge Representation, Search/CSP, and Reasoning with Uncertainty dominate, adding up to more than half the submissions. Among the smaller areas, Machine Learning shows consistent and substantial growth.

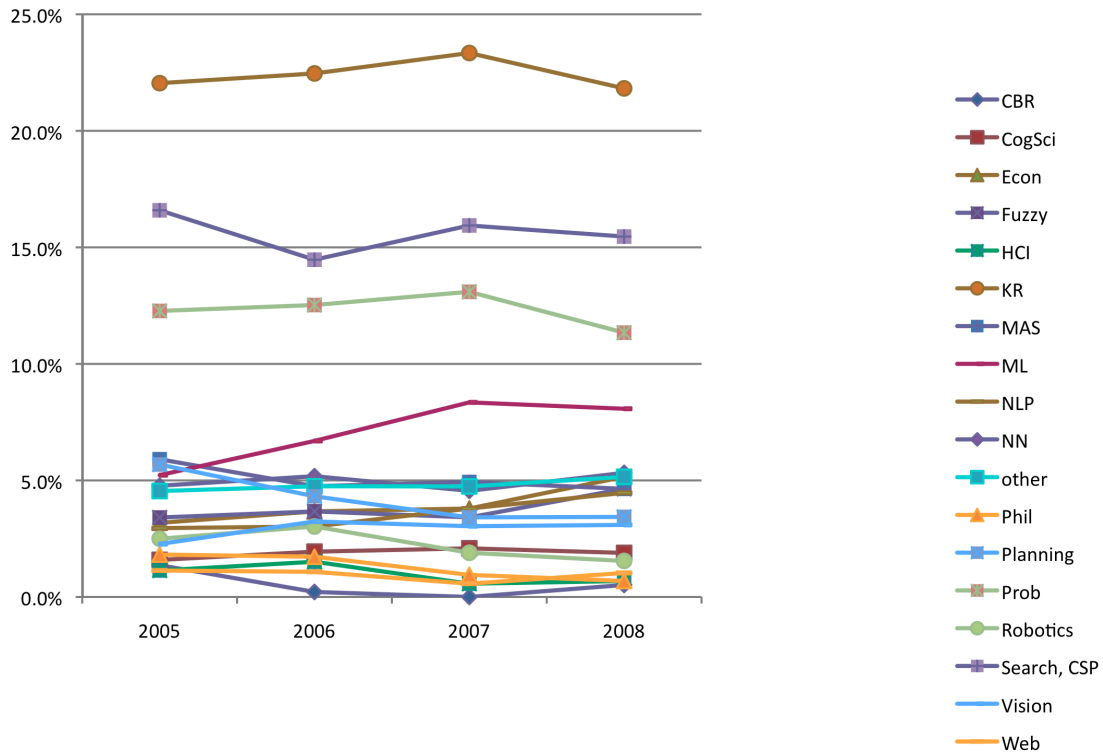


Figure 5. Submissions by topic area.

Figures 6 and 7 show acceptance rates over the period 2004-2008 by topic. Acceptance rates in the dominant areas of KR and Search/CSP are around our average of about 30%. Planning is higher, at almost 50%. In some areas such as vision, cognitive science, robotics, neural nets and philosophical foundations, we compete against well-established, area-specific journals, and are not being offered the best papers, so most are rejected. Acceptance rates in planning, search/CSP, and economic modeling is above average.

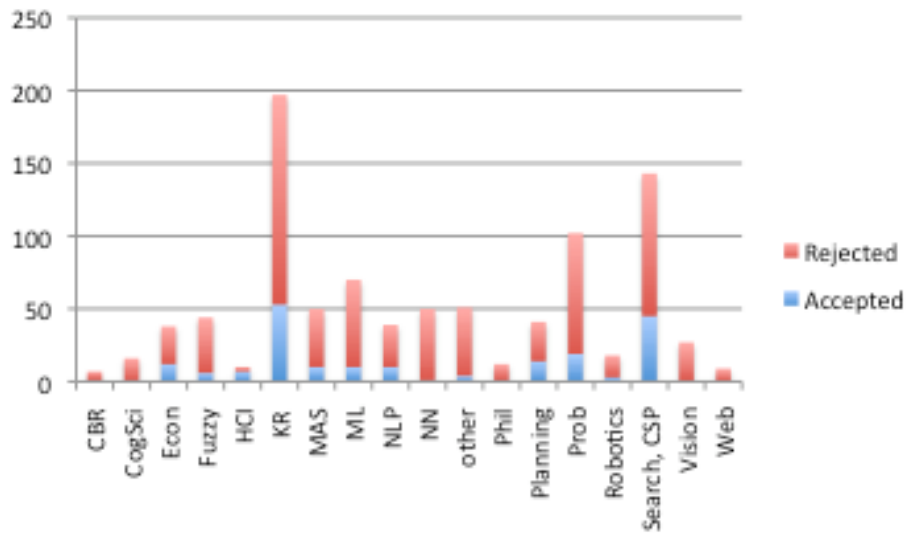


Figure 6. Acceptances and rejections by topic.

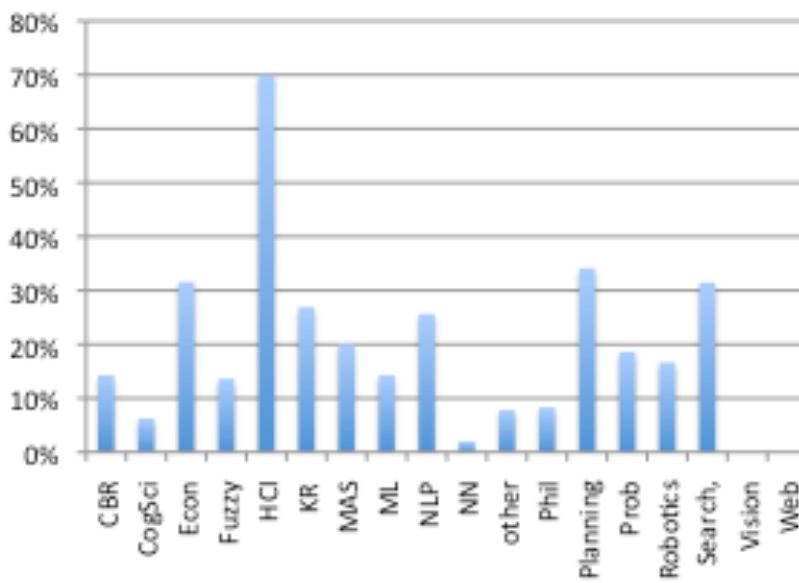


Figure 7. Acceptance rate by topic.

REVIEWING TIME

We have made a significant effort since 2001 to improve our reviewing process and to decrease the decision time for regular papers. We broke the 100-day barrier in 2007 at 81 and reduced this further to 73 in 2008 (see Figure 8).

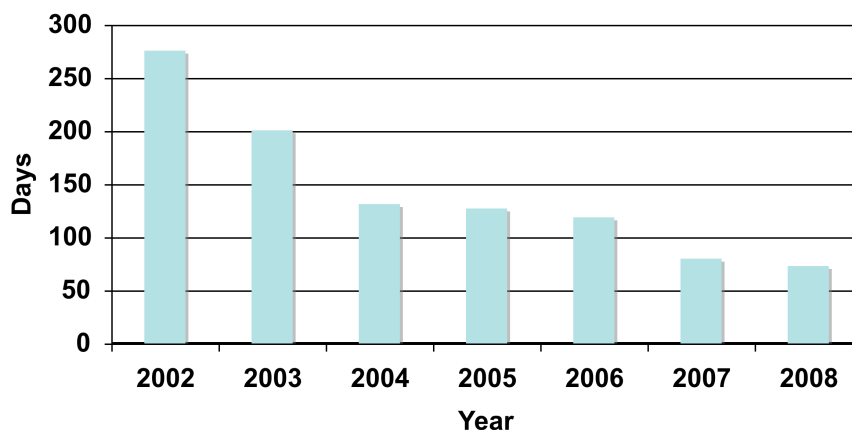


Figure 8. Mean time to first decision

The major part of this is the time for reviewers to submit their reviews. We normally give reviewers six weeks (and four for research notes and second reviews).

The mean figure for decision time includes all submissions, including summary rejects, but it is really how long it takes for papers to go through the full reviewing process that is of concern to authors. Table 1 compares decisions for 2007 and 2008 submissions into those that were rejected without review, or in first round, or in second, and acceptances, which are almost all after two reviews. Average decision time for an accepted paper in 2008 went up to 126 days from 91 in 2007, mostly due to a few particularly difficult cases. Average time to rejection, however, decreased, as we made more decisions before sending papers out to reviewers.

Table 1. Breakdown of Time to First Decision, by Decision

	2008	2008	2007
	Number	Average (Days)	Average (Days)
Reject -- Summary	73	10	12
Reject -- 1st round	61	104	105
Reject -- 2nd round			110
Reject -- all	134	53	69
Accept	17	126	91
In revision	36	125	128
Total	187	73	81

ACCESS TO AIJ FOR IJCAI ASSOCIATES

Starting on May 29, 2008, anyone can register as an IJCAI Associate at <http://www.ijcai.org> and then register for access to AIJ on Science Direct.

CONCLUSION

The year 2008 was a stable year for the journal, with some measures going up and others down slightly, and the arrival of the very important wider access.