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# ARTIFICIAL INTELLIGENCE JOURNAL

## REPORT TO THE EDITORIAL BOARD

July 2010

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Editors in Chief

### SUMMARY

This is a report on the state of the AI Journal (AIJ) as of the end of 2009 presented to the board at its meeting in Atlanta, Georgia on July 13, 2010. Although impact factor decreased slightly from 2008, articles submitted and paper downloads at ScienceDirect increased, and the mean time to first decision, now at 64 days, continued to decrease.

### PUBLISHED ARTICLES

As shown in Figure 1, the number of regular and articles was about the same as in 2008, with a decrease in the number of special issue articles.

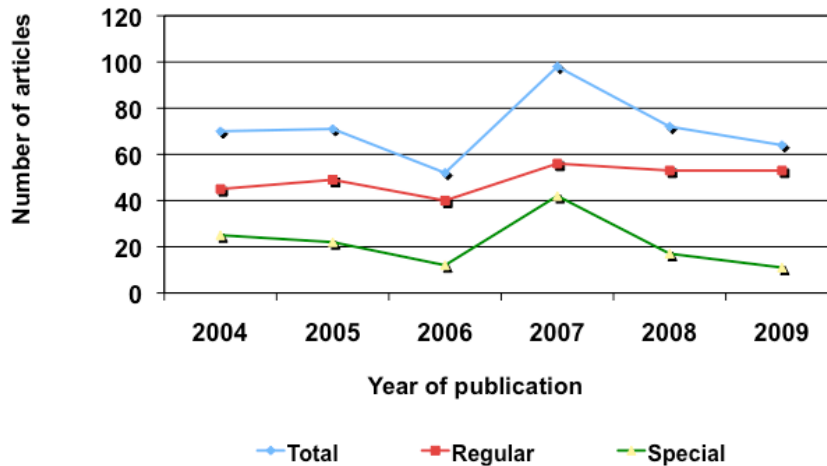


Figure 1. Published articles.

### REGULAR SUBMISSIONS

Table 1 shows the recent history of submissions to AIJ. Figures shown for 2009 include a few papers submitted before January 16, 2010, when AIJ changed editorial systems (see below). Each column shows the status as of July 1 of regular papers submitted in that calendar year. 2010 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.

	2005	2006	2007	2008	2009	2010 YTD
In review	0	0	0	9	17	36
Prov Accept	0	0	0	1	20	10
Accepted	38	61	51	40	30	0
Rejected	95	113	145	141	135	77
Other	4	11	8	1	8	0
<b>Total</b>	137	185	204	192	210	123
<b>Gross Acceptance</b>	29%	24%	26%	22%	18%	0%
<b>Expected Acceptance</b>	29%	35%	26%	25%	31%	25%

Table 1. Regular Submissions

Submissions for 2009 are up slightly from 2008 and the acceptance rate appears to be going back up to the roughly 30% which it has been for several years..

## SPECIAL ISSUES

As well as our annual review issue in December, we published one special issue with 11 papers in 2009, on Advances in Plan Generation, edited by Maria Fox and Sylvie Thiebaux.

## READERSHIP AND IMPACT

AIJ's ISI 2-year impact factor was 3.036, 10<sup>th</sup> in 2009 among Computer Science and AI journals. This is compared to 3.4 and 7<sup>th</sup> in 2008. In recent years, the only journals with higher impact factors were in the areas of vision and image processing, evolutionary computing and neural networks. In 2009, *Computational Intelligence* surged to the top of the list, for reasons we don't fully understand. As a "journal of record" AIJ's cited half-life continues to be at the very top, greater than 10 years..

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. Over 20% of the downloads now come from China.

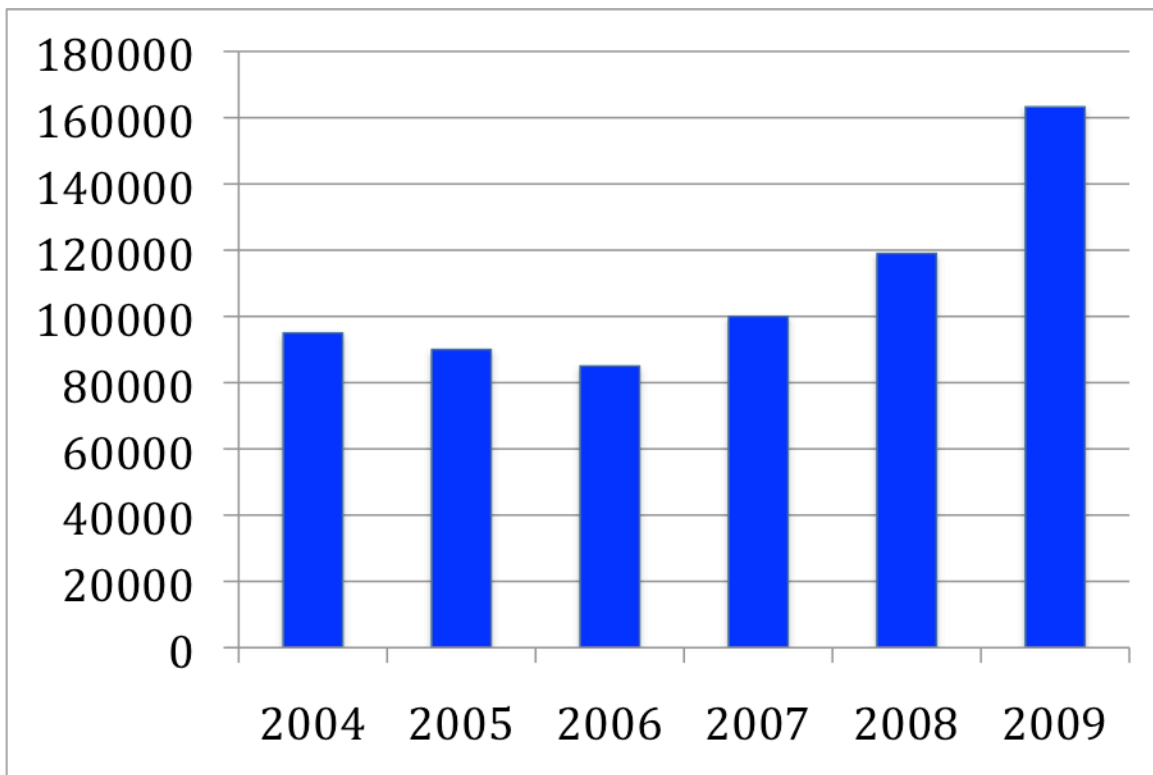


Figure 2. AIJ downloads on ScienceDirect.

### **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 2009 saw a continued 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.

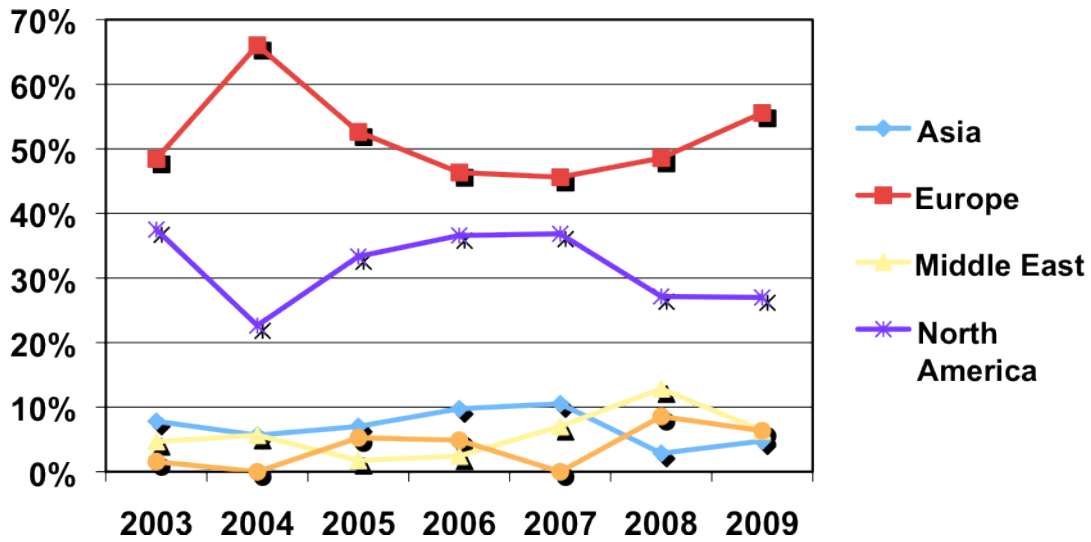


Figure 3. Geographic distribution of corresponding authors of published papers.

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.

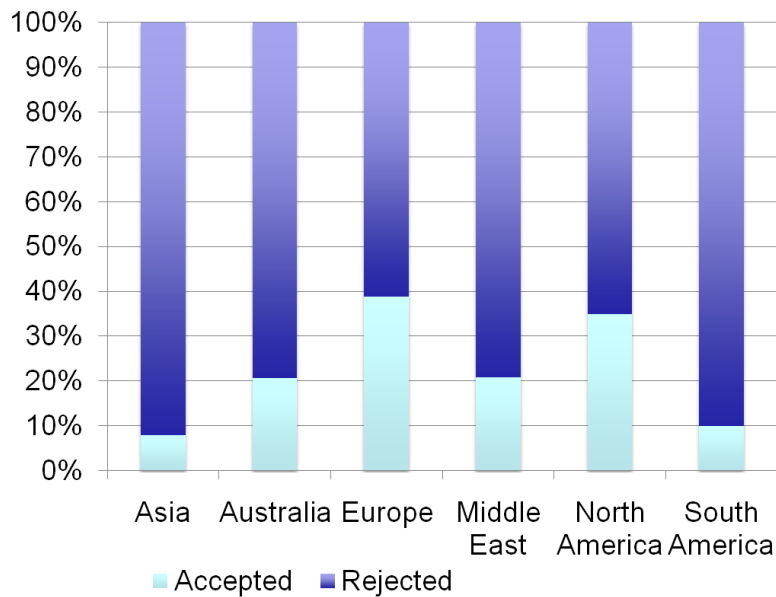
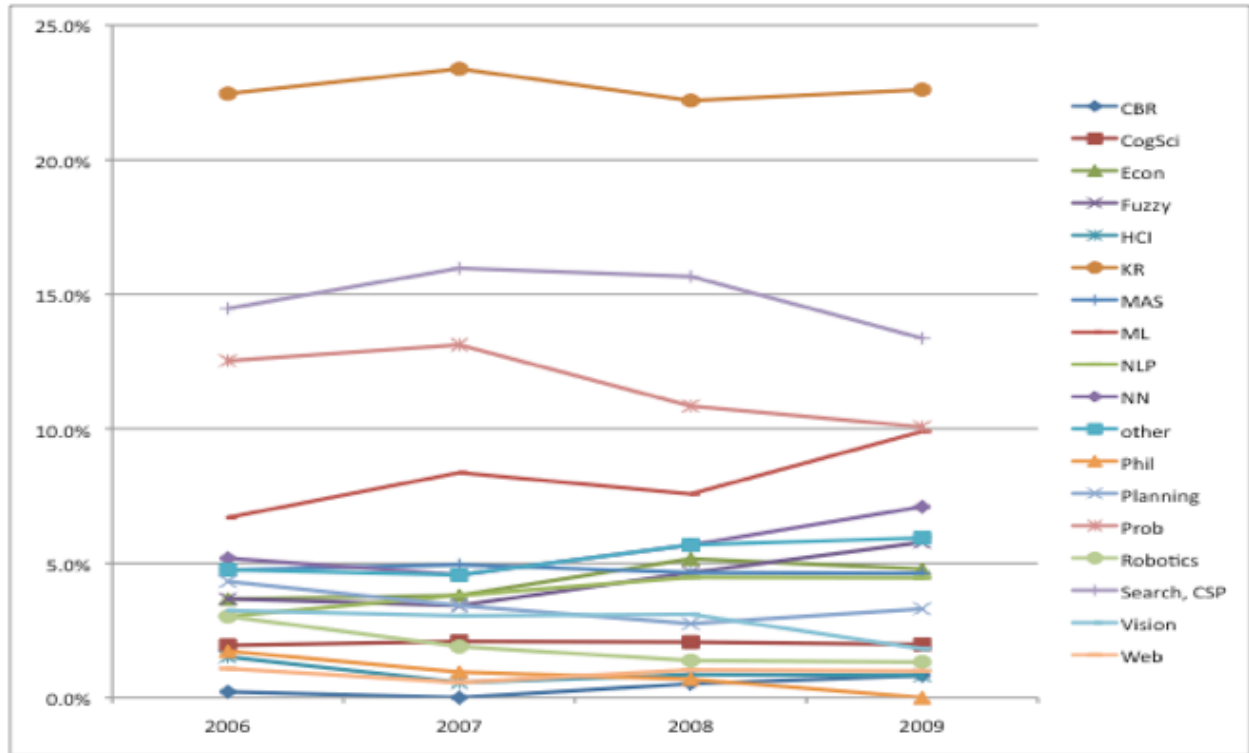


Figure 4. Decisions by geographical area for 2005-2009.

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.

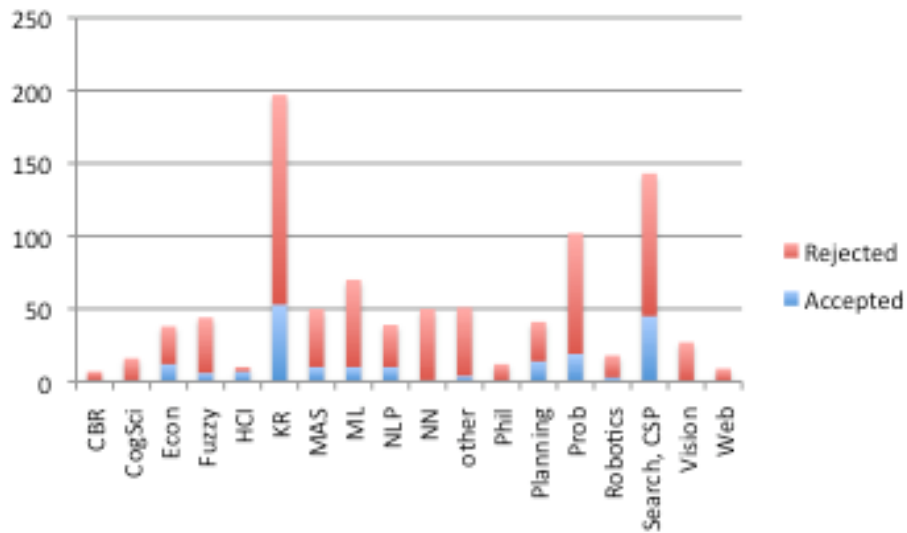


Figure 6. Acceptances and rejections by topic.

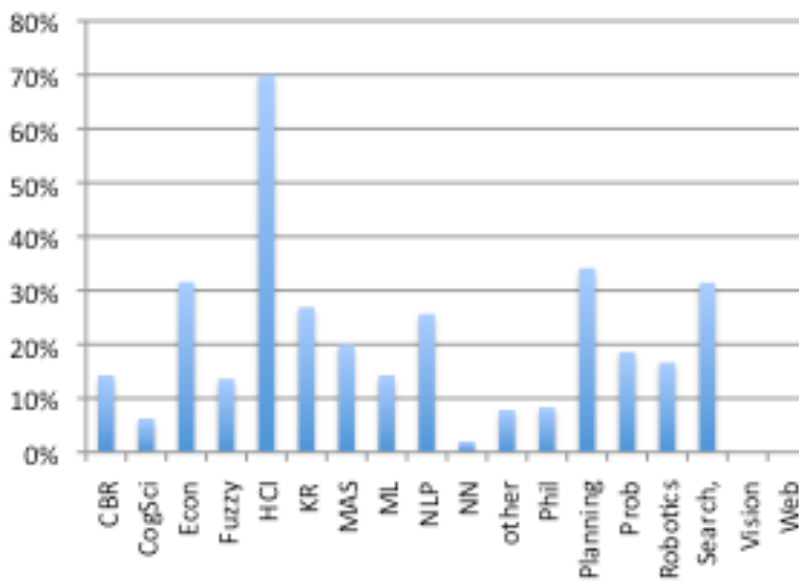


Figure 7. Acceptance rate by topic.

## 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 64 in 2009 (see Figure 8).

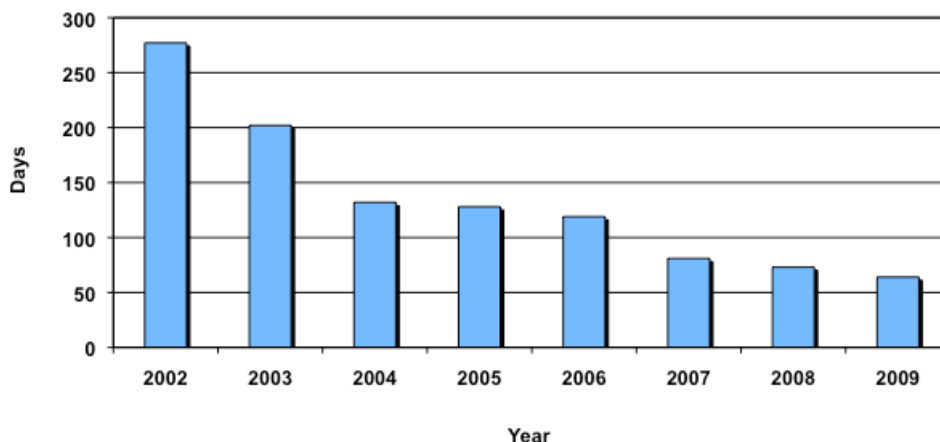


Figure 8. Mean time to first decision

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 2 compares decisions for 2008 and 2009 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 2009 went down to 91 days from 129 in 2008,. Average time to rejection decreased slightly due to somewhat faster summary rejects and better handling of first decisions on papers that would eventually be rejected in second round.

Table 2. Breakdown of Time to First Decision, by Decision

	2008	2008	2009	2009
	Number	Average (Days)	Number	Average (Days)
Reject -- Summary	73	10	70	8
Reject -- 1st round	65	97	62	96
Reject -- 2nd round	4	136	3	88
<b>Reject -- all</b>	142	53	135	50
<b>Accept</b>	39	129	30	91
<b>In revision</b>	9	132	37	105
<b>Total</b>	190	73	202	64
<b>Total w/o summary rejects</b>	117	111	132	97

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## **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.

## **MOVE TO ELSEVIER EDITORIAL SYSTEM**

As of January 16, 2010, new paper submission and reviewing is done through the Elsevier Editorial System, accessible at <http://ees.elsevier.com/artint>.