

Journal of Artificial Intelligence Research: 2008 Annual Report

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August 21, 2008

Abstract

We are pleased to present the annual report on the status of JAIR. The report covers the activities of the journal in 2007 and the first half of 2008.

Executive summary

The journal published 44 papers in 2007 compared to 46 in 2006. So far in 2008, we have published 30 papers. We therefore expect to publish slightly more papers in 2008 than 2007. In 2007, we received 288 submissions, up 16% on 2006. Given the number of submissions so far this year, we expect around 220 submissions in total in 2008. This would be down a little on 2007.

The 2008 IJCAI-JAIR best paper prize was announced during the AAI-08 opening ceremony. The 2008 prize was awarded to *Pure Nash Equilibria: Hard and Easy Games* by G. Gottlob, G. Greco and F. Scarcello. An Honourable mention was given to P. Beame, H. Kautz and A. Sabharwal for *Towards Understanding and Harnessing the Potential of Clause Learning*. Our thanks to Gerhard Lakemeyer, Dan Roth, Francesca Rossi and Yoav Shoham for their time and effort in selecting these papers.

In line with the recommendation of the 2007 JAIR working group on DOIs, we explored a number of options for providing DOIs within JAIR. After input from AAI Press and ACM, we decided on the following plan.

1. We register DOIs for all new articles with Bowker. We hope to complete this before end of 2008. By choosing Bowker, we do not (unlike with CrossRef) have to register the references and their DOIs. We have asked AAI to help support our costs. The JAIR production system will be modified to generate automatically the XML file required to register a DOI with Bowker. The JAIR production system will also be modified to include DOIs in the JAIR website.
2. We register DOIs for the approximately 500 articles in the JAIR archive with Bowker. We hope to complete this before end of 2nd quarter 2009.
3. In the longer term, if tools become available to automate the process, we will look at including DOIs of the references in the registration meta-data, as well as within the pdfs and online in the website.

Finally, we are pleased to report that the JAIR subscribers mailing list is now re-working.

Publication statistics

We published 44 papers in 2007, compared to 46 in 2006. So far in 2008, we have published 30 papers. We have 8 papers in the final stages of production which will appear before the year end. In addition, there are 6 other papers accepted subject to authors completing minor revisions. We therefore expect to publish more papers in 2008 than in 2007. We attribute some of the increase in published papers to a reduction in the size of our production pipeline.

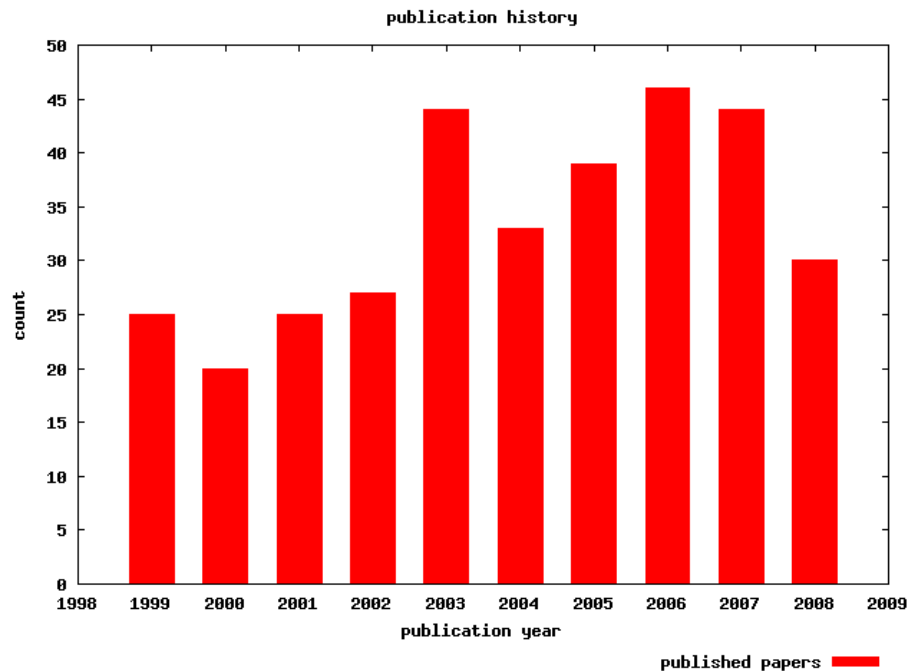


Figure 1: Published papers in JAIR by publication date.

In the last annual report, we noted that time for the final version of papers to appear online had been growing. We are pleased to report that our efforts to address this, by stream-lining our production steps and reducing the time given to authors to revise their papers from 3 months to 2 months, appear to be working. Authors have not reported difficulty in preparing their revisions within the 2 months.

Submission statistics

In 2007, we received 288 submissions. This was a 16% increase over 2006. In 2008, we have so far received 102 submissions. Assuming submission rates over

the year follow the same trends as 2007, we would expect to receive around 220 submissions by the year end, down a little on 2007.

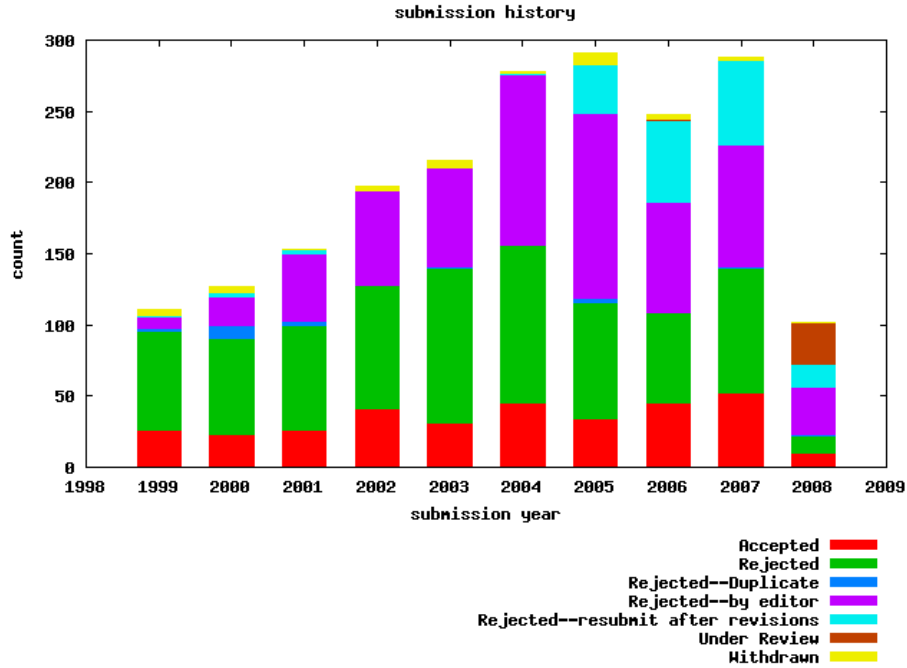


Figure 2: Submitted papers in JAIR by submission date.

The drop in submissions in 2006 was largely due to a reduction in the number of summary rejects. This coincided with the introduction of an online questionnaire on our web submission page that we hoped would reduce the number of submissions rejected without review.

The acceptance rate for all submissions in 2007 was 18%, which is identical to 2006. Of papers sent out for review, the acceptance rate in 2007 decreased slightly to 26% compared to 27% in 2006. If we do not count resubmissions, the acceptance rate in 2007 fell slightly to 32%, down from 36% in 2006. For resubmitted papers, the acceptance rate was 56% in 2007, down from 62% in 2006. It is too early to draw conclusions for acceptance rates in 2008 as many papers are still out for review. However, acceptance rates for 2008 look broadly similar to 2007.

Regional statistics

As is usual, we received most of our submissions in 2007 from Europe and North America. There was a slight drop of submissions from North America (though

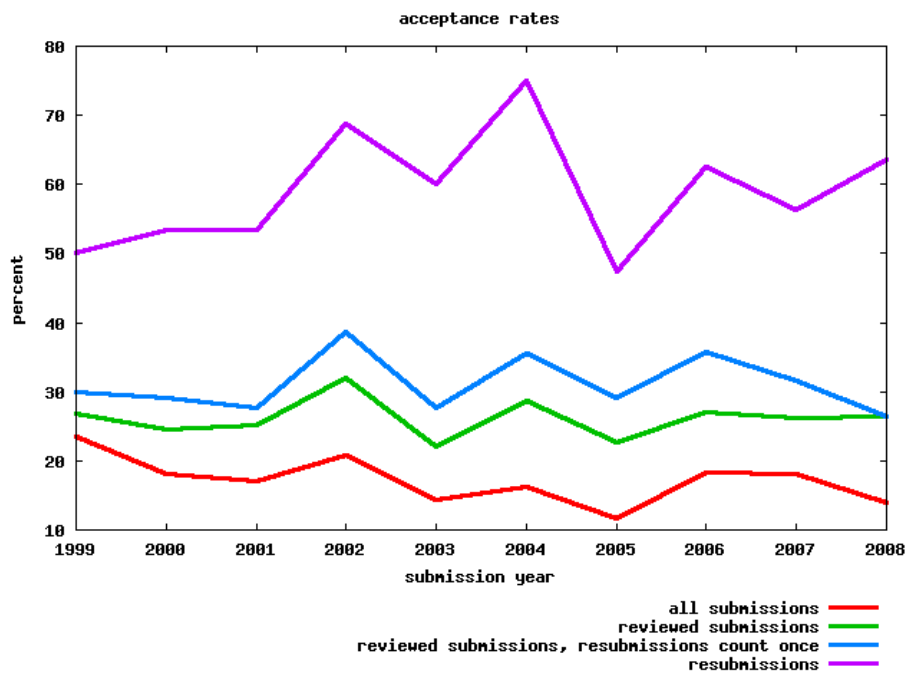


Figure 3: Acceptance rates by submission date.

not by as much as we predicted in last year’s report). There was a significant increase in submissions from Europe.

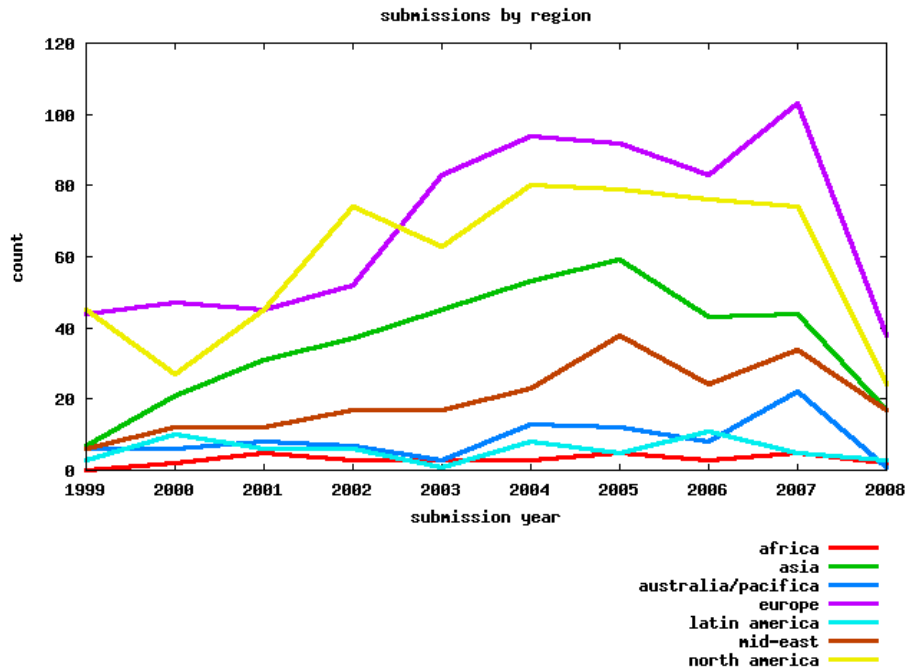


Figure 4: Submissions by region organized by submission date.

Subject statistics

Machine learning remains the most popular topic, having 52 submissions in 2007 (identical to 2006). Search and constraint satisfaction had 34 submissions (down from 40 submissions in 2006), and was overtaken by knowledge representation (44 submissions) and multi-agent systems (39 submissions). Other popular topics were NLP with 25 submissions (up from 19 in 2006), and planning/scheduling with 18. Neural networks, which dropped to 8 submissions in 2006 from 33 in 2005, picked up again to 15 submissions.

The most popular topic for papers published in JAIR in 2007 was search and constraint satisfaction (11 papers), However, knowledge representation (8 papers), multi-agent systems (8 papers) and machine learning (5 papers) were also popular topics for published papers. In 2006, due to the Special Track on the 4th International Planning Competition, there were 13 papers published on planning/scheduling. In 2007, this fell to just 3 papers. However, 6 planning and scheduling papers have already been published in 2008.

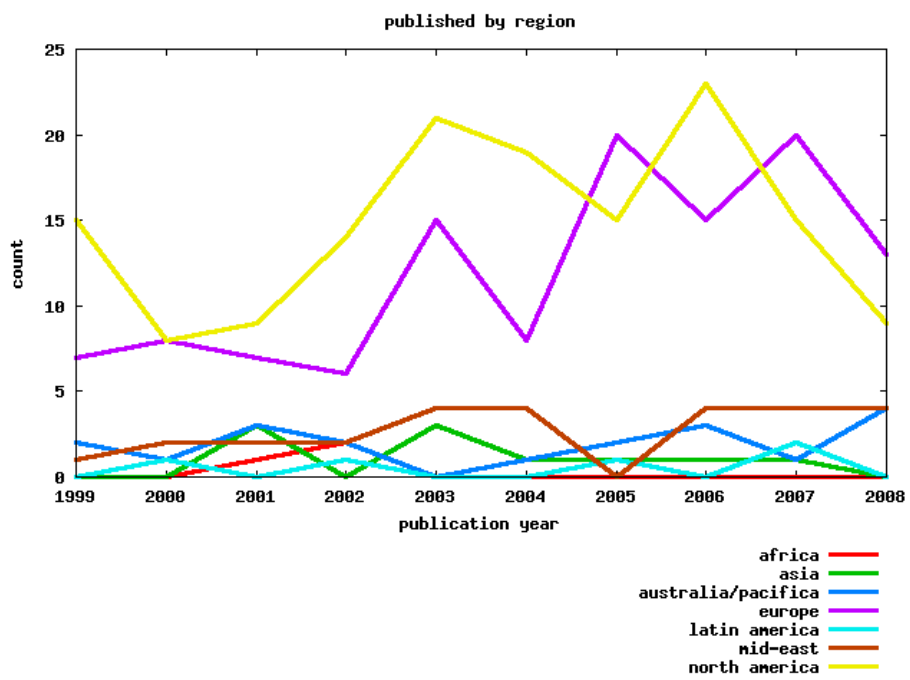


Figure 5: Published papers by region organized by submission date.

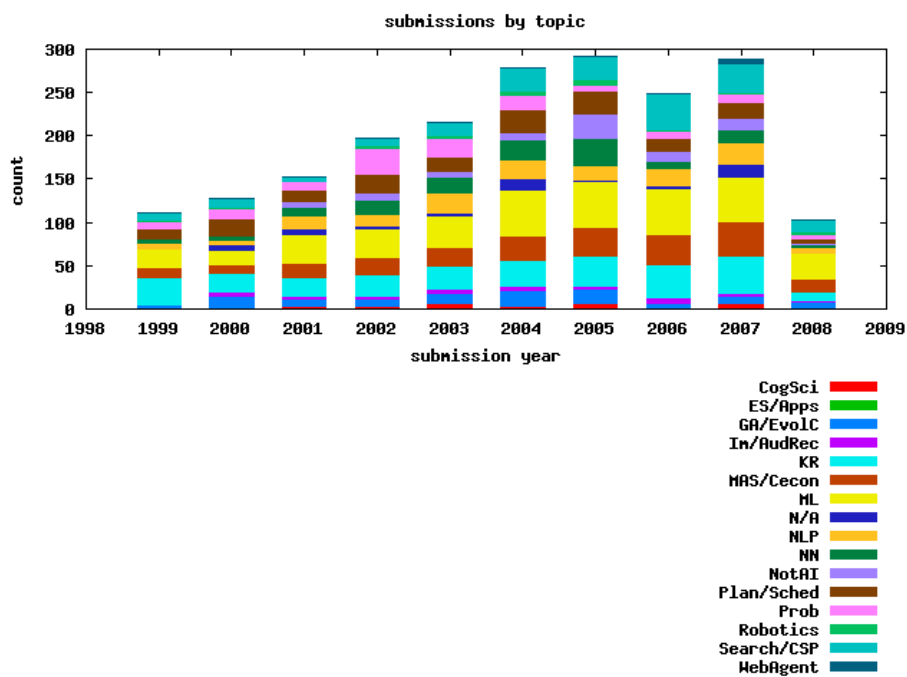


Figure 6: Submissions by topic organized by submission date.

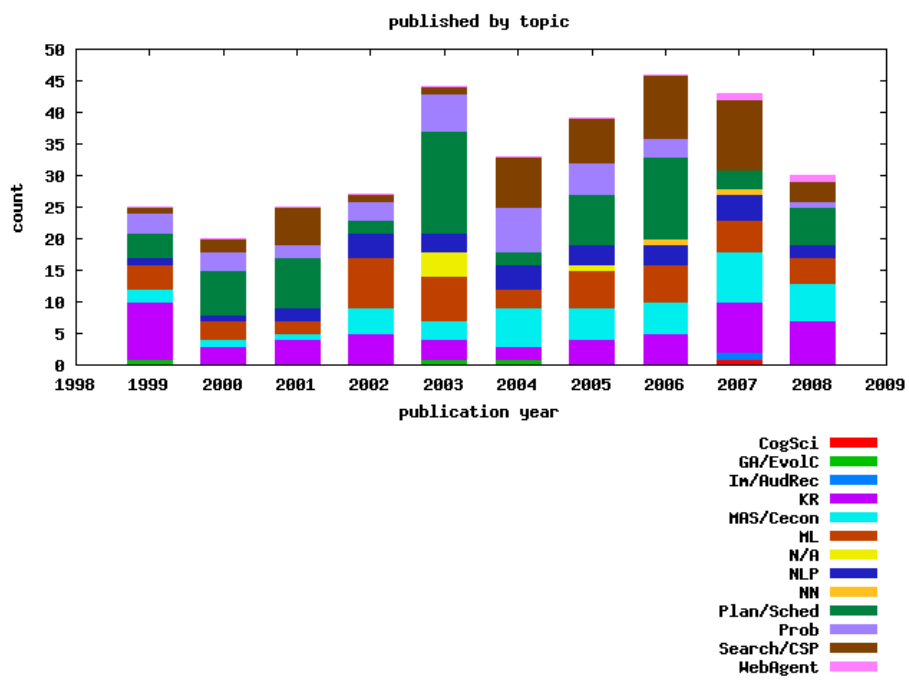


Figure 7: Published papers by topic organized by submission date.

Temporal statistics

Thanks to the tireless efforts of our Associate Editors, the time from submission to a decision for reviewed papers dropped again from 92 days in 2006 to 87 days in 2007. However, it appears that we can never rest as the processing time in 2008 currently stands back at 92 days. The average time to return a decision across all submissions reduced from 65 days in 2006 to 64 days in 2007. The average time to return a decision in 2008 currently stands at just 53 days.

For papers that we go on to publish, the average time to review dropped in 2007 to 88 days compared to 89 days in 2006 and 105 days in 2005. So far in 2008, papers being published have taken just 80 days to be reviewed. Again, many thanks to our Associate Editors. The time from submission to publication decreased from 189 days in 2006 to 188 days in 2007. In our last annual report, we had noticed a large increase in the time to publication for the first part of 2007. To counter this worrying trend, we stream-lined our production process and reduced the time given to authors to revise their papers. This appears to be working. We expect further improvements in 2008 as the time from submission to publication currently stands at just 133 days.



Figure 8: Time to a decision by submission date.

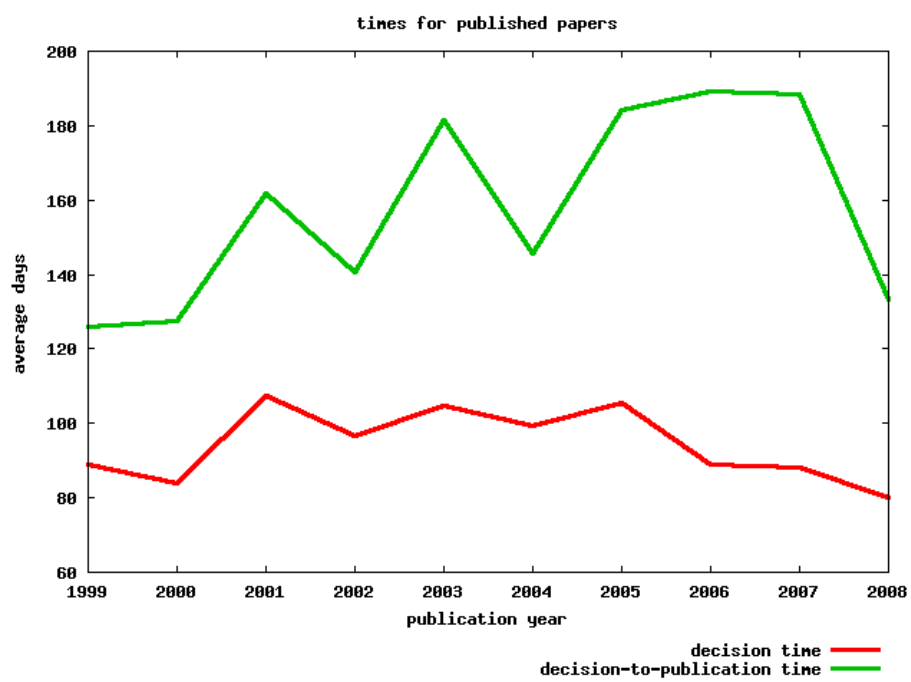


Figure 9: Time to publication by submission date.