Editorial

Time to Publication: A Progress Report

JOSEPH Y. HALPERN

The process of submitting a paper to a journal can be incredibly frustrating for authors. Practically everyone who has been active in research for more than a few years has either first- or second-hand experience with some real horror stories. One of my goals when I took over *JACM* was to ease some of these frustrations, by speeding up the time to publication. I'd like to give you a sense of our progress in reaching that goal.

Traditionally, a paper submitted to *JACM* went through many steps: the paper was submitted to the editor-in-chief; the editor-in-chief sent it to an editor; the editor sent it to referees; the paper went through one or more iterations between the referees, editor, editor-in-chief, and author(s); if the paper was accepted, it went on to the publication queue; authors received galleys and corrected them; and the paper finally appeared.

As a result, the median time from submission to final acceptance for papers published in 1997 was 20 months. I would like to cut this down to 12 months.

Often the most frustrating experience for authors is to submit a paper and then, after more than a year of waiting, to discover that it has been rejected. I don't have reliable statistics yet for how long such papers were in the system, but I would like to see significant progress here too. I would expect that the median time in the system for papers that are ultimately rejected will be 4 months.

My predecessor, Tom Leighton, focused on what was the major cause of delay—the amount of time an accepted paper waited in the publication queue before it appeared. This wait used to be measured in years. The fact that the mean time to publication for 1997 was 20 months already shows how significant the improvement has been here. Currently (April 1998) the *JACM* web site (<http://www.acm.org/jacm/Upcoming.html>) shows that there are 19 papers in the queue, which means that the wait is approximately 3 issues, or 6 months. Since it is considered dangerous for an editor-in-chief to have too small a backlog, this is about the best that can be expected as far as the publication queue, at least until *JACM* goes completely electronic. Note, however, that final papers submitted in postscript are posted on the web site within a few days of submission; the papers on the queue are available to the world almost immediately.

What about the other potential delays? I think here we have also made major progress. Most authors now submit papers directly to the responsible editor, cutting out one link in the chain. In addition, we have been much more aggressive about encouraging editors and referees to produce timely reports. The policy of having a two-step review process, with a quick first review to see if a paper meets *JACM*'s high standard and a more in-depth review if it does (see <http://www.acm.org/jacm/Refereeing.html>), has allowed authors whose papers do not quite meet the standards to submit to another journal without incurring the penalty of spending a lot of time in review with us; it also seems to have

significantly cut down review time overall. Finally, I have added a number of new editors to the board, so that no editor is too heavily loaded.

At this point, it gives me great pleasure to announce the three most recent additions to the board—Maurice Herlihy, who, along with Michael Merritt, will be handling papers in Distributed Computing; Prabhakar Raghavan, who will be handling papers in Probability and Computing; and Stuart Russell, who will be taking over for Drew McDermott as editor for Artificial Intelligence. In addition, Guy Blelloch is assuming responsibility for Architecture as well as Parallel Computing; John Hennessy is stepping down as editor of Architecture. I'd also like to thank Drew and John for their many years of service to *JACM*; their efforts are very much appreciated.

I conclude with some data on time to publication. The data is still somewhat sparse. By this time next year, I hope to be able to provide detailed data, showing the amount of time that a paper spends in each part of the process. However, even the data I have shows the progress that's been made.

I have divided the papers into two groups—those that were in the system when I took over as editor-in-chief (in May 1997) and those that were submitted after May 1997.

As of April 1998 of the 132 papers that were active when I took over, 31 have been accepted, 49 were rejected, 24 are in the author's hands, 20 are with the reviewers, and 8 were withdrawn. Thus, only 20/132—less than 15%—are currently still in review. Many of these are going through their second review. Put another way, this says that there are 20 papers that have been in the system for more than a year and are still in our hands. I should add that these numbers give a somewhat inaccurate impression of the acceptance rate, which is about 20–25%. Given that papers that are rejected are quite often rejected quickly, we would expect that if we take a snapshot of the system at any given time, it will show a higher proportion of eventual accepts than the true proportion.

Of the 101 papers that have been submitted in the last eleven months—5 have been accepted, 36 have been rejected, and 57 are in review (but this includes ones that were submitted in the last few weeks), 1 was withdrawn, and 2 are with the authors.

The fact that there have been so many quick rejections is, in large part, due to the two-step reviewing policy.

Finally, I note that the 101 submissions over the past 11 months—which corresponds to roughly 110 papers/year—is historically on the low side. I would like to see closer to 150 papers/year and, as I said, expect to accept roughly 20–25% of them.

Let me conclude by once again thanking the editorial board and my administrative assistant, Cindy Robinson. None of this would have been possible without them.