Foreword

Welcome to the first issue of IEEE Computer Architecture Letters (a.k.a. “Letters”) since it became a publication of the IEEE Computer Society, on a par with its magazines and transactions. This new publication replaced the Newsletter of the IEEE Technical Committee on Computer Architecture (TCCA). In 2001, TCCA recast it into a more meaningful vehicle for the computer architecture community, and in 2005 it was recognized as an official publication of the IEEE Computer Society. The idea of a short paper format, with quick publication time, was suggested by Kevin Skadron, and immediately struck the right chord with the entire Advisory Board. Since January, I have stepped into the big shoes of Yale Patt, the first Editor-in-Chief. Kevin Skadron will remain Associate Editor-in-Chief.

Of course, “Letters” is quite different from the Computer Society magazines and transactions. Indeed, the objective of Letters is to publish short, timely articles of high quality, highly novel work. We have all lamented the long delays in our field between submissions of manuscripts and their ultimate appearance in print. Even conferences take many months between submission and publication. Letters was created in response to this problem and has achieved an average response time of 37 days (93% of the submissions are resolved in less than 2 months) for the 180 submissions received since December 2001. Our acceptance ratio is 23%. We hope that the quick turn-around will encourage researchers to submit their ideas for immediate recognition. Since IEEE Computer Society allows publication in its conferences and journals if there is at least 30% new material, this should not constrain researchers to follow later with full conference papers or journal articles.

In order to facilitate rapid review and limit the time from submission to acceptance/rejection, papers are limited to four pages maximum. We recognize that four pages is not enough space to describe a complete, exhaustive treatment of a problem. We feel, however, that it is enough space to publish good ideas with enough evidence to illustrate their viability. Submitted manuscripts are sent immediately to an Editorial Board member for handling. He/she will review the paper personally, and will solicit additional, external reviews. If the paper is accepted, it will be immediately posted to the IEEE Digital Library, and scheduled for publication in the next print issue. In this way, we expect accepted papers to appear on the web site within weeks of submission, and appear in print within a few months of submission. Our model is to not allow major revisions. In the interest of quick turnaround and no backlog, papers are either accepted or rejected, or accepted with revisions only if the revisions are minor and can be accomplished in less than one week's time.

The kind of paper that we continue seeking is an early, “wow” idea that may not yet be ready for a full, major, international conference publication, but has enough validated insights to justify publication as a four-page letter. We recognize that some authors may prefer to take the extra time to solidify the research for publication at a prestigious conference rather than risk losing the idea to someone who takes the Letters paper and runs faster with it than the original author. We encourage you to not succumb to that mentality, but rather to submit your new work and get “credit” for the seminal idea, regardless of the outcome of subsequent conference submissions. Since we expect Letters to be read by a large fraction of the computer architecture community (and 4-page papers are a lot easier to read than 10-page papers!), credit for the seminal idea is almost guaranteed. We suggest that the seminal idea on one's CV is more valuable than the turn-the-crank-with-lots-of-data papers that we seem to encounter too frequently in the major conferences and journals. It remains, of course, for the community at large to validate this thesis.

Finally, we hope you enjoy this new issue and look forward to your comments. This issue includes all extant Letters papers that were accepted in 2005 but had not yet appeared in print, as well as two new papers that were accepted in 2006.

Our charter is not cast in concrete. We are susceptible to new good ideas. Please feel free to provide your input as to what you would like to see Computer Architecture Letters accomplish (and perhaps other “Letters” in related fields).

Jean-Luc Gaudiot
Editor-in-Chief

Yale Patt
Outgoing Editor-in-Chief

Kevin Skadron
Associate Editor-in-Chief