

Multiple Perspectives on Multimedia

DEAR Reader,

On behalf of the Steering Committee, welcome to the first issue of the IEEE TRANSACTIONS ON MULTIMEDIA. This new TRANSACTIONS is jointly sponsored by four IEEE Societies: Circuits and Systems, Signal Processing, Communications, and Computer. Each of these partners brings to the publication its own perspective about what multimedia is. I recall first hearing the word “multimedia” about a decade ago at an IEEE conference. In that particular instance, the emphasis was on devices to perform multimedia processing. The circuits and systems perspective is very much oriented toward devices to perform the functions that are intrinsic to multimedia, so you might think it was a CAS conference I was attending. Of course, what these devices were doing is computing, which certainly falls within the realm of the Computer Society. More specifically, what was being presented was digital signal processing, which includes the name of the Signal Processing Society, and is also an active technical area within the Communications Society. This simple example illustrates how multimedia draws upon technical areas within all four “partner” societies. That is also the reason why it made sense for these four Societies to co-sponsor this transactions. (In the interest of remaining impartial, I won’t reveal the name of the conference or its sponsor. It is worth mentioning that the word “multimedia” was used in an exhibitor’s booth rather than in a technical session. At the time, it seemed like a marketing buzzword.)

The new IEEE TRANSACTIONS ON MULTIMEDIA will cover various aspects of research in multimedia technology and applications including, but not limited to: circuits; algorithms and macro/micro architectures; software; detailed design, synchronization, interaction, joint processing, and coordination of multimedia and multimodal signals/data; compression, storage, communication, networking, and multimodality devices and systems; all of which affect how we will live, work, and play in the future. Some of the types of signals involved include: audio, video, speech, image, communication, geophysical, sonar, radar, medical, and musical. Does this sound like something for everyone? Does it sound like something for you as a reader or author? We expected it would. The complete list of editorial categories is given elsewhere in this issue and can also be found on our URL: <http://www.ieee.org/tab/tmm.html>.

Multimedia is better experienced than described, so we would like to infuse this transactions with the experience of multimedia. That’s why subscribers not only receive a paper copy, but have access to an electronic version as well (directions for access via the web-page address above). We are working on a way for authors to submit their signals for posting with the electronic version of the paper. Until we get that in place, we encourage authors to provide URLs for the location of their signals so that readers can begin experiencing live signals and using them for research comparisons. Eventu-

ally, it might be feasible for authors to provide demonstration programs via the web that help illustrate particular aspects of their work. We welcome your ideas on how to make this transactions a full, multimedia experience.

From the outset, it was the goal of the “partner” societies to create the premier publication in multimedia—the one most authors will select for publishing of their work. Achieving that will automatically make the IEEE TRANSACTIONS ON MULTIMEDIA the first reference to which researchers turn. We hope to attract seminal papers that document the development of the field. We also want to be known for rapid publication of these papers. Routinely achieving fast time through review to publication benefits both our authors and our readers, and will undoubtedly increase the popularity of our publication. Every step of our manuscript handling procedures have been designed to foster a “culture of immediacy” that will see manuscripts from submission to publication in significantly less time than most peer reviewed publications. If you are asked to review a manuscript for the IEEE TRANSACTIONS ON MULTIMEDIA, we expect you to complete a thorough review in a relatively short (but reasonable) amount of time.

In publishing this first issue, we exceeded our own goals for rapid manuscript handling. This was very much out of necessity. IEEE did not formally approve the creation of the IEEE TRANSACTIONS ON MULTIMEDIA until late June 1998, which effectively eliminated the normal window for issuance of a Call for Papers. Manuscripts were solicited through all of the technical committees of the partner Societies and disseminated far and wide through all available electronic channels. Papers were requested to be submitted by September and final manuscripts of accepted papers needed to be submitted by 30 November, to meet the production schedule. This could not have been done without the concerted effort of the editor-in-chief, the associate editors, reviewers, authors, and our publications staff, who were willing to put so many other things aside to assure a meaty, and timely, first issue of the IEEE TRANSACTIONS ON MULTIMEDIA. The schedule was demanding but WE MADE IT!! Many thanks to one and all.

As a new publication in an increasingly electronic age, we are trying out some other new procedures. One of them is the use of electronic tools for submission of the FINAL, APPROVED manuscript for publication (please do not use these for your initial submission). There is one format for LaTeX users and a different one for Word users. NO OTHER FORMATS WILL BE ACCEPTED for final manuscript submission. Why these two? Because IEEE has studied the matter and determined that 90% of electronic submissions continue reliably to be submitted in LaTeX or Word. Why not other formats? Because it is important to keep down the cost of publication (and, therefore, the price) and conversion for multiple formats is increasingly costly. A side benefit to authors of using the on-line tools is the ability to edit the paper to the eight-page maximum length, while appropriately

sizing tables, graphs, etc., and seeing pretty much what the final paper will look like in its printed form.

We expect multimedia to be a rapidly growing area. The IEEE TRANSACTIONS ON MULTIMEDIA hopes to publish more short- to moderate-length manuscripts as opposed to a few long manuscripts. These seem to be the types of papers people most want to read. And we want to serve the needs of the multimedia community in publishing the work of authors rapidly, which requires us to make the best use of available page budget. So, to encourage this policy, we have set the limit for published manuscript pages at eight (8), and have set charges to publish every page over eight at \$220 per page (there are other charges for use of color, etc.). If this overlength page charge seems a little stiff, it is meant to discourage needless repetition or statement of the obvious, and to encourage tight, expositive writing that presents new research and sparks interest in new approaches. When it is decided to be in the best interest of the

development of the field of multimedia to publish a manuscript that exceeds eight pages, the author will be expected to confirm ability to defray the expense of each overlength page, and to actually meet that commitment.

Finally, I wish to acknowledge the efforts of Prof. Bing J. Sheu of the University of Southern California, as our first Editor-in-Chief. Bing is appointed by the Steering Committee as EIC for the first three years of this publication. He has a distinguished reputation and has also served previously as EIC for the IEEE TRANSACTIONS ON VLSI. We are fortunate to have found such a capable initial EIC.

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