"I feel very strongly that . . . only in a magazine of the quality of IEEE Micro, where we as writers are unencumbered by stylistic manifestos and ludicrous length constraints, is [it] possible to write the quality of articles that I am interested in writing . . . I feel that it is due to your efforts that this environment exists. I am also thankful to Joe Schallan and his group for doing an outstanding job with the copy editing. As a combination, you and your organization evoked the quality that was most satisfying to us."

—1983 IEEE Micro industrial author

It has been customary to publish a message from the editors-in-chief in the February issue of IEEE Micro. In the message, we thank the many individuals who have made the magazine successful during the preceding year, reiterate editorial policy concerning the types of papers we would like to publish, and announce changes in personnel. This message will be no exception, but this year we would like, in addition, to provide you with some impressions of the editorial process as seen from the editor-in-chief’s desk.

Who are you, our readers, and what types of material are of interest to you? Few of you provide comments concerning the quality of the magazine on the reader service cards or take the time to write letters to the editor, whether for publication or not. For three years, you have remained somewhat of a mystery. No longer. As a result of the efforts of Janet Endrijonas and her colleagues on the IEEE Computer Society staff, we conducted a survey in 1983 of the readership of IEEE Micro. The complete results are published at the end of this message. A few points are worth noting. Over 78.4 percent of you are at the middle to top managerial levels in administration, research, and manufacturing. 51.2 percent of you have earned master’s or doctor’s degrees. 77.2 percent of you save copies of IEEE Micro for reference. 14.2 percent of you own Apple personal computers, while 13.0 percent of you have IBM PCs. (The survey showed the Apple and IBM to be the most widely owned brands.) Finally, 98.7 percent of you feel that IEEE Micro’s articles are understandable and easy to apply. A total response base of 391 was used in the preparation of the study.

What conclusions about the editorial approach of IEEE Micro can we derive from these results? Unfortunately, no questions about the technical quality and level or the editorial balance of subjects were asked, so we should be careful about making any conclusions concerning such issues. We can safely conclude, however, that most of you are in industry and that therefore an industrial bias in the magazine should be evident. But is such a bias present? No. Why not? Let us explain.

Over the editor-in-chief’s desk pass all submitted manuscripts, all reviews by our excellent group of referees, and all recommendations by members of our editorial board. We have observed that there is “competition” between manuscripts submitted from academia—where the emphasis upon publication is clear—and those submitted from industry. Though in 1983 only 7.6 percent of our readers were educators, 54 percent of the manuscripts submitted were from academia. Manuscripts from both groups were equally successful in negotiating the review process. Such a situation makes it difficult to publish a magazine with a strong industrial bias. Unfortunately, the situation tends to feed on itself. The greater the number of academic papers we publish, the more IEEE Micro is perceived as a magazine for academic work. And this, of course, leads to a still higher percentage of academic manuscript submissions relative to industrial ones. (It is not our intention to antagonize our academic friends with these comments. We are simply stating the statistics of manuscript submission and drawing some conclusions about the effect of submissions on editorial balance.)

How can we redress the imbalance? We appreciate the fact that industrial authors are very busy and may have little time to spend on an article that will be critically reviewed—and perhaps rejected—by referees. Industrial authors are rewarded for work that usually has a direct economic benefit. If asked to publish, why should such authors choose IEEE Micro, with a circulation of 26,000, when they can publish in EDN, Electronic Design, Electronics Week, Computer Design, or Byte, magazines that have several times our subscriber base?

One answer is contained in the quote that appears at the beginning of this message—it is from a letter recently sent to us by one of our 1983 industrial authors. We strive to be different from trade magazines in several important respects. We are willing to publish longer articles with more technical detail, dividing them into two parts where necessary and appropriate. We do not wish just to announce new hardware, software, or systems. We want the author to explain what decisions and trade-offs were made during the design process, how the product works, and what special characteristics it exhibits. Application suggestions—early versions of application notes—are encouraged. And if you have an interesting idea you feel may not fit our magazine (or, perhaps, any magazine), please contact us anyway. We are interested in new approaches.

February 1984
We have begun to make a special effort to pursue industrial articles—witness, for example, the stronger contacts we developed with Motorola during 1983. Douglas MacGregor and David Mothersole contributed an article on the MC68010 to our June 1983 issue, and Clayton Huntsman and Duane Cawthon discussed the MC68881 in December 1983. James Sibigroth offers insights into the design of the MC68HC11 in this issue, and MacGregor and Mothersole will contribute an article later this year on the MC68020. In 1984, we hope to improve our contacts with companies, large and small.

We handled several articles in 1983 as “fast-track” submissions, which means that we processed them so that only about three months elapsed between the day we received them and the day they appeared in print. This provides authors with a way to get significant articles quickly published, even if they are lengthy and contain a lot of technical detail. We can publish one fast-track article per issue.

IEEE Micro is, above all, a volunteer effort. We do not have a paid staff to handle the soliciting of manuscripts. We do not have a significant budget for travel in pursuit of them. We have full-time jobs in companies and universities and perform our editorial tasks in our spare time.

We therefore rely on you, our readers, to view the magazine in terms of opportunities for publication of your ideas and products.

We would like to thank those many individuals who have helped in so many ways to make IEEE Micro one of the IEEE’s most successful magazines. We thank our authors, the members of the editorial board, our very fine referees (who are listed below). True Seaborn—our editor and publisher, and the IEEE Computer Society’s Publications Board, Governing Board, and Magazine Advisory Committee. Our department editors—Robert Stewart, Vic Nelson, Richard Stern, and David Hannum—have made the magazine substantially more lively and informative in 1983. We say farewell to Pat Fasang, an associate editor who has been with IEEE Micro from the beginning and who has done a marvelous job. Pat is moving to a new job in the Sunbelt. We welcome new editorial board members Jim Farrell, who is manager of technical communications at Motorola in Austin, Texas, and Dick Stern, who has been our regular computer law columnist for the past two years.

This year, we would like to give very special thanks to two individuals whose efforts have ensured the quality of the magazine. Our art director, Jay Simpson, has provided us with magnificent covers. Our favorite is his drawing for the August cover. Our managing editor, Joe Schallan, who was mentioned in the quote at the beginning of this message, copy-edits the manuscripts and oversees the proofing, production, and final assembly of the magazine. Joe is every bit as important to the success of IEEE Micro as any author or editor, including the editor-in-chief.

1984 will witness several experiments by IEEE Micro, all of which will be related to electronic journalism. The managing editor and the editor-in-chief recently obtained personal computers—Zenith Z-100s—and modems, which will be used to speed the editorial process and “save keystrokes.” Moreover, the editors-in-chief, the managing editor, and the members of the editorial board are on Compmail+, an electronic mail service provided by the IEEE Computer Society. We encourage those of you who are on Compmail+ to use it as a direct communication channel to the editors—just access the MAIL facility and type “P. RONY,” “T. CAIN,” or “J. SCHALLAN” at the “To:” prompt. We shall publish details on Compmail+ and we encourage you to join. We are also exploring the possibility of making source code available to you by electronic mail.

Another experiment is an article on the history of the calculating devices that are the ancestors of today’s electronic computer. This article, which appears in this issue as our tribute to the IEEE centennial, reveals an ancient technology whose sophistication may surprise many readers. Though scarcely about the latest hardware, to be sure, this account is nonetheless enjoyable and thought-provoking. We have published one historical article previously, “A History of Microprocessor Development at Intel,” by Robert N. Noyce and Marcian E. Hoff, Jr. For those of you who have been involved in the design and development of microcomputers—at places like Motorola, Texas Instruments, Zilog, Mostek, and Advanced Micro Devices—please consider IEEE Micro as a place to tell the story of your company’s contribution to the microelectronics revolution.

We welcome our two new sister magazines, IEEE Software, with Bruce D. Shriver as editor-in-chief, and IEEE Design & Test of Computers, with Roy Russo in the editor-in-chief chair. We welcome also the spirit of cooperation among the Computer Society’s magazines that Bruce and Roy have promoted.

Peter Rony
Tom Cain

1983 IEEE Micro reviewers

Michael Andrews
Chad Baker
Amir S. Bey
Dileep Bhandarkar
Peter S. Castro
William J. Cody
R. G. Colclaser
Rob Daasch
John Davidson
Rick Davies
Roger Dickey
Keith Diefendorff
Carl Friedlander
H. Frost
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