



Computer Society publications recently began copy editing articles on-line. This issue of *IEEE Software* is the first society magazine to edit all articles electronically. Following that lead, *IEEE Software's* sister magazine, *IEEE Design & Test*, is editing most of its August issue on computer. One of its authors sent not only an electronic version of his manuscript, but also a computer-generated image of himself. The image has become his trademark, Wayne H. Wolf of AT&T Bell Laboratories explained, and even appears on all electronic mail messages he sends to his colleagues.

## IEEE Software begins on-line editing, typesetting

*Galen Gruman, Assistant Editor*

This issue of *IEEE Software* marks the first Computer Society magazine to be copy edited and typeset with the society's new electronic editing system. Articles were received over phone lines and edited on the society's IBM PCs. The edited files were run through an in-house program to convert them to coded, typesettable ASCII files.

Since *IEEE Software* began publication in January 1984, an average of two articles per issue have gone through the review and technical editing process completely electronically, with files transferred through electronic mail services. Four of this issue's articles were reviewed on-line.

Several article referees have done their work exclusively on-line. Editor-in-Chief Bruce Shriver routinely sends "soft" copies of all the forms sent to authors and reviewer's through electronic mail services.

The society began computerizing its copy editing process a year ago. *IEEE Micro* has received and edited some of its articles since April 1984 using a Zenith Z-100 PC. *IEEE Design & Test* and *IEEE Software* began writing departmental copy on IBM PC XT's when the computers were installed this winter. *IEEE Computer Graphics and Applications* and *Computer* started using the PCs shortly thereafter.

Each workstation was loaded with Microsoft Word's word processing program and Hayes' Smartcom II telecommunications software. Work on the typesetting conversion program, related utilities, and a set of typesetting codes common to all five magazines began in earnest.

*IEEE Software* editors contacted the authors for the July issue and asked if they had electronic versions of their manuscripts. All did, and all agreed to be edited electronically.

Most articles were retrieved by editors who dialed in to the authors' main-

frames. The editors used their PCs as remote terminals and accessed the authors' ASCII files from special accounts or directories set up for them by the authors. This proved to be one of the fastest method of receiving and sending files.

The special section on international parallel processing efforts was sent through electronic mail, the other quick transmission method. Guest Editor Joanne L. Martin transmitted the section from a Bitnet account via a gateway to the editors' electronic mailbox on the Computer Society's Compmail+ network. Through various gateways, authors can send articles to Compmail+ from Educom, Bitnet, CSnet, ARPAnet, and UUCP.

Authors can also send ASCII, WordStar, or Microsoft Word files on IBM DOS-compatible disks or ASCII.

Because most files received had been run through a text editor program by the authors to make the printouts originally submitted to the magazine, editors had to strip out extra spaces, hyphenation, and page format codes. Codes for bold, italic, superscripted, and subscripted text were replaced with the society magazines' codes.

Editors included comments to the authors and notes indicating major revisions in the edited files sent back electronically to the authors. Authors added their corrections and alterations to these revised files and sent them back to *IEEE Software's* editors.

These final files were run through an in-house typesetting conversion program that stripped out the comments.

The system also improved turnaround time. In one case, an edited manuscript downloaded into an author's mainframe in the morning was ready to be uploaded back to the editor with the author's changes that afternoon.