Electronic mail has enhanced the working experience of individuals in many institutions. The ability to send mail to other persons at any time, to read received mail at any time of the day, to forward mail to others when appropriate, to use distribution lists to send mail to multiple individuals simultaneously, and other features make this capability important to many of us. However, this advance in communications is not without its associated problems. Just as our home and office mail boxes are filled with junk mail, so too our electronic mail boxes often are filled with unnecessary items we must view to determine their significance and our response. In the article, “XMAIL: An Intelligent Electronic Mail System”, Milam Aiken and Luvai Motiwalla introduce us to the concept of intelligent or knowledge-based electronic mail systems. After delineating the potential difficulties of electronic mail, they enumerate the advantages of the new technology of intelligent e-mail. To describe how this technology can help users of such systems, they use examples from XMAIL, a knowledge-based e-mail system developed at the University of Mississippi on a local area network.

Another common problem arising in schools, universities, and other organizations that establish microcomputer laboratories for their users is the fact that the hard disk drives commonly found on these PC’s often become filled with extraneous files. As a result, the microcomputer laboratory staff is burdened with the task of determining what files can be deleted, what files are needed to properly run the software which rightly belongs on the system, what files need to be changed to restore them to their proper installation configuration, etc. Norman A. Garrett and Terry D. Lundgren in their article, “Microcomputer Laboratory Maintenance” present us with a detailed plan for reducing the difficulties associated with a microcomputer laboratory. The ideas and specific DOS commands and files will enable anyone interested in this technique to adapt it to their own organization with minimal changes.

For a long time, the development of neural networks has been primarily associated with advanced uses of computing technology, in particular, expert systems. Within the last few years, these techniques have become of increasing interest to a variety of businesses and other organizations. Neuromcomputing—the application of neural networks to the problems of business—is the subject of the article “Neurocomputing Approach to Residential Property Valuation” by Ming-te Lu and Debra H. Lu. The article begins by providing a description of neurocomputing and examples of its application to different types of business problems. After discussing how neural computing applications differ from traditional computing, the authors provide us with a detailed exploration of the application of neural computing to the problem of assessing the market value of residential real estate. The development of the system is reviewed, and results of applying the system to selected properties are listed. The article concludes with a discussion of the advantages and disadvantages of neurocomputing.

In The Expert’s Opinion section, Nancy Rockey discusses how the Harrisburg Area Community College implemented a revolutionary integrated information systems management program back in the early 1980s and how it continues to thrive. Greg Welsh, our hardware review editor, introduces us to the subject of virtual reality. He helps us to look forward to the potential for desktop computing in the future and acquaints us with uses of virtual reality. In our software review, Jan Travers, reviews a package that is particularly useful at this time of the year, namely MacInTax. This package for use on the Apple Macintosh computer is designed to aid the user with the preparation of income forms. The system is easy to use, uses an interview technique to ensure that the proper forms are included, and provides help for both your return preparation this year and your tax planning for next. In the book review section, M.A. Saber reviews “The Intelligent PC: Knowledge-based Solutions for Today’s Business Problems” by John S. Bowie and William R. Arnold. This book guides the user through the development process of a number of knowledge-based systems. After reviewing these systems, the authors define a development methodology for such systems. Our second review is provided by Mohammad Dadashzadeh. The book “Wicked Problems, Righteous Solutions: A Catalogue of Modern Software Engineering Paradigms” by Peter DeGrace and Leslie Hulet Stahl challenges the assumptions behind many software development methodologies and their variations.

As usuals, we welcome your comments, suggestions, and submissions.

Glenn Byerly
Associate Editor