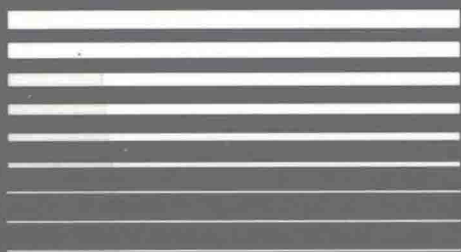




UNDERSTANDING COMPUTER INFORMATION SYSTEMS

Paul W. Ross
H. Paul Haiduk
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Understanding Computer Information Systems



- ❖ Paul W. Ross
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Preface

The Audience For This Book

The revolution in information technology continues to influence our lives dramatically. The need to become familiar with “why” computers are an integral part of organizations today, as well as “how” they can be used, is an important goal. Ultimately, if you are a business major or in a related field, the impact of computers and information technology on all aspects of your life will be great.

Such a diverse group of students has one thing in common: they need to learn fundamental computer concepts. By providing an in-depth coverage of essential computer concepts, *Understanding Computer Information Systems* is intended to support a first course in computer fundamentals for majors and nonmajors alike.

Why This Book Was Written

Students today want to gain the practical information they need to deal with the computer in the work place. They need to learn key concepts without being burdened with unnecessary detail. Our approach is to strike a balance between understanding the “whys” of information technology and the “hows” of practical usage. This book was written because the available textbooks did not satisfy the needs of students. Many of the introductory computing books are too comprehensive and contain too much material to cover in one course. Many of the smaller books miss their target of satisfying course needs because they have a shallow coverage of too few concepts. On top of this, many texts do not have a sufficiently practical orientation, presenting material that is too technical for nonmajors.

Why You Should Consider This Book

We believe *Understanding Computer Information Systems* will suit your course needs better than other textbooks because it has been written to provide the instructor with the most flexibility. It can be used as a stand-alone introduction to computing course, as a part of a larger course serving several goals, such as an introduction to computing and application software course, or as a part of a customized text that includes applications tutorials from West’s Microcomputing Custom Editions.

Proven Pedagogy

This book has been written with student comprehension in mind. The easy-to-read style enhances the learning process for the student. In addition to this interesting pedagogical style, Learning Objectives clearly state objectives the student will have mastered after reading the text. Text concepts are organized and presented in a concise and logical manner. Feature Side Boxes describe new technologies, or new applications of existing ones, to add a real-world emphasis to key concepts in each chapter. A Summary of the material reinforces the learning process. Key Terms are defined in the margins of the text next to the discussions that introduce them, and in the Glossary at the end of the text. Review Questions test the student's mastery and understanding of the material. Discussion Questions are provided for classroom discussion, short papers, or projects the student can prepare outside of class.

How To Use This Book

Understanding Computer Information Systems is designed for a one-semester or one-quarter course. The book can be used by itself, as an introductory computer literacy book, or with West's Microcomputing Custom Editions. West will custom bind *Understanding Computer Information Systems* with other modules from its comprehensive list of popular software application tutorials. For a complete list, please see the Publisher's Note following the Preface, or contact your local West Representative.

How This Book Is Organized

This book is divided into eight independent chapters for maximum flexibility for the variety of needs this book will serve. Instructors may cover the chapters in their preferred sequence without any loss of continuity.

Chapter 1: Introduction and History includes an introduction to essential concepts in hardware, operating systems, and general software issues, and a short history of computers.

Chapter 2: Data and File Management introduces the student to concepts of files and databases for organizing, storing, retrieving, and managing data.

Chapter 3: Communication and Networks covers fundamental telecommunications concepts, including hardware and software issues, networks, and applications.

Chapter 4: Management Information Systems and Decision Support Systems are discussed in the context of their integration into modern management.

Chapter 5: Office Automation and Personal Productivity Tools presents popular word processing, spreadsheet, database, and graphics applications as productivity enhancement tools for professionals.

Chapter 6: Desktop Publishing presents the powerful features available in desktop publishing systems for creating professional looking publications. The discussion includes hardware and software needs and some fundamental page design concepts.

Chapter 7: Systems Analysis and Design covers the many dimensions of solving problems using computers, from setting objectives to the process of testing and installing appropriate hardware and software.

Chapter 8: Ethical, Social, and Security Issues shows the impact of computers on our society.

Appendix A: How to Buy Your First Computer covers important issues to consider when purchasing a microcomputer.

Appendix B: Answers to Odd-Numbered Review Questions offers students the opportunity to test their understanding of each chapter.

A complete **Glossary** of key terms and an **Index** appear at the end of the text.

Supplements

An instructor's manual with test bank and transparency masters is available to assist instructors teaching from this book. The test bank has been prepared with a range of questions testing general knowledge as well as conceptual understanding of the material. The test bank includes multiple choice, true/false, and short-answer essay questions. Transparency masters include important screen captures and figures from the text.

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In conclusion, we hope you enjoy reading and using the book as much as we have enjoyed writing it.

Paul W. Ross
H. Paul Hiaduk
H. Willis Means
Robert B. Sloger

Fall, 1991



Publisher's Note

This book is part of THE MICROCOMPUTING SERIES. This series was started in 1985 and quickly grew to provide the most comprehensive series of textbooks dealing with microcomputer applications software. We intend to continue the high standards of our earlier books as we expand the number of software topics and provide a flexible set of instructional materials. This unique series currently includes five different types of books:

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3. A series of hands-on laboratory tutorials are entitled *Understanding and Using*; they are software specific and cover a wide range of individual packages. These manuals, written at an introductory level, are both self-paced tutorials and complete reference guides. A complete list of series titles can be found on the following pages.

4. Several larger volumes combining DOS with three application software packages are available in different combinations. These texts are titled *Understanding and Using Application Software*. They condense components of the individual lab manuals and add conceptual coverage for courses that require both software tutorials and microcomputer concepts in a single volume.

5. A series of advanced-level, hands-on lab manuals provide students a strong project/systems orientation. These are titled *Developing and Using*.

THE MICROCOMPUTING SERIES has been successful in providing you with a full range of applications books to suit your individual needs. We remain committed to excellence in offering the widest variety of current software packages. In addition, we are committed to producing microcomputing texts that provide you both the coverage you desire and also the level and format most appropriate for your students. The Acquisitions Editor of the series is Rick Leyh of West Educational Publishing; the Consulting Editor is Steve Ross of Western Washington University. We are continually planning for future volumes in this series. Please send us your comments and suggestions:

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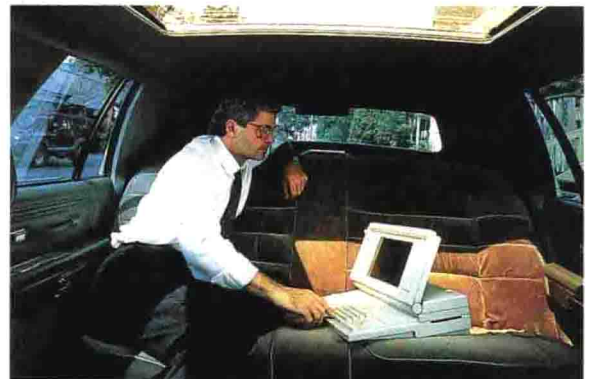
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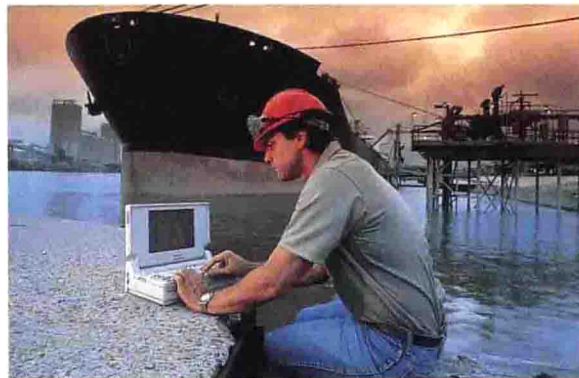
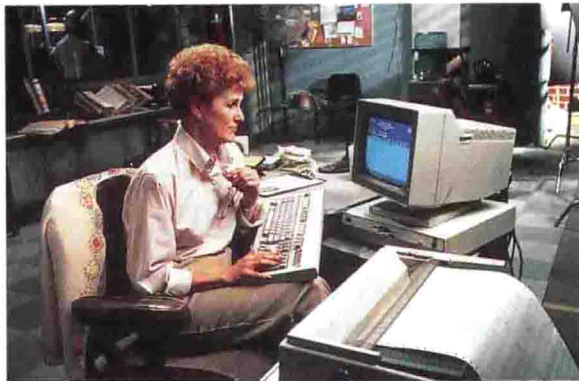
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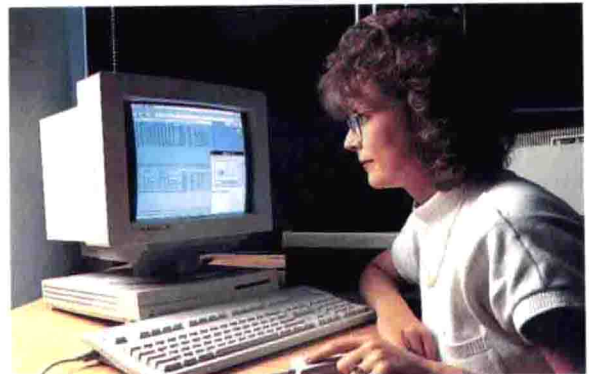
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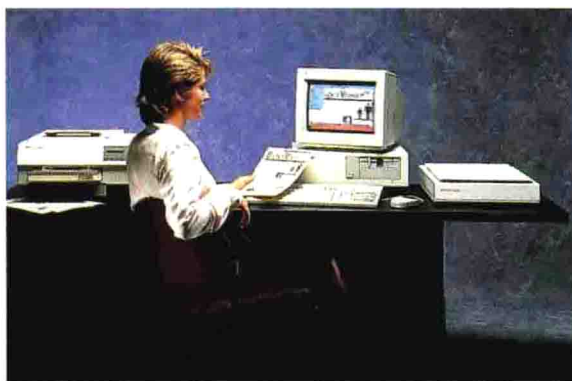
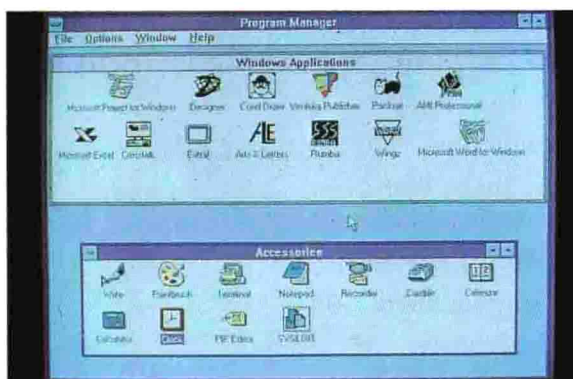
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