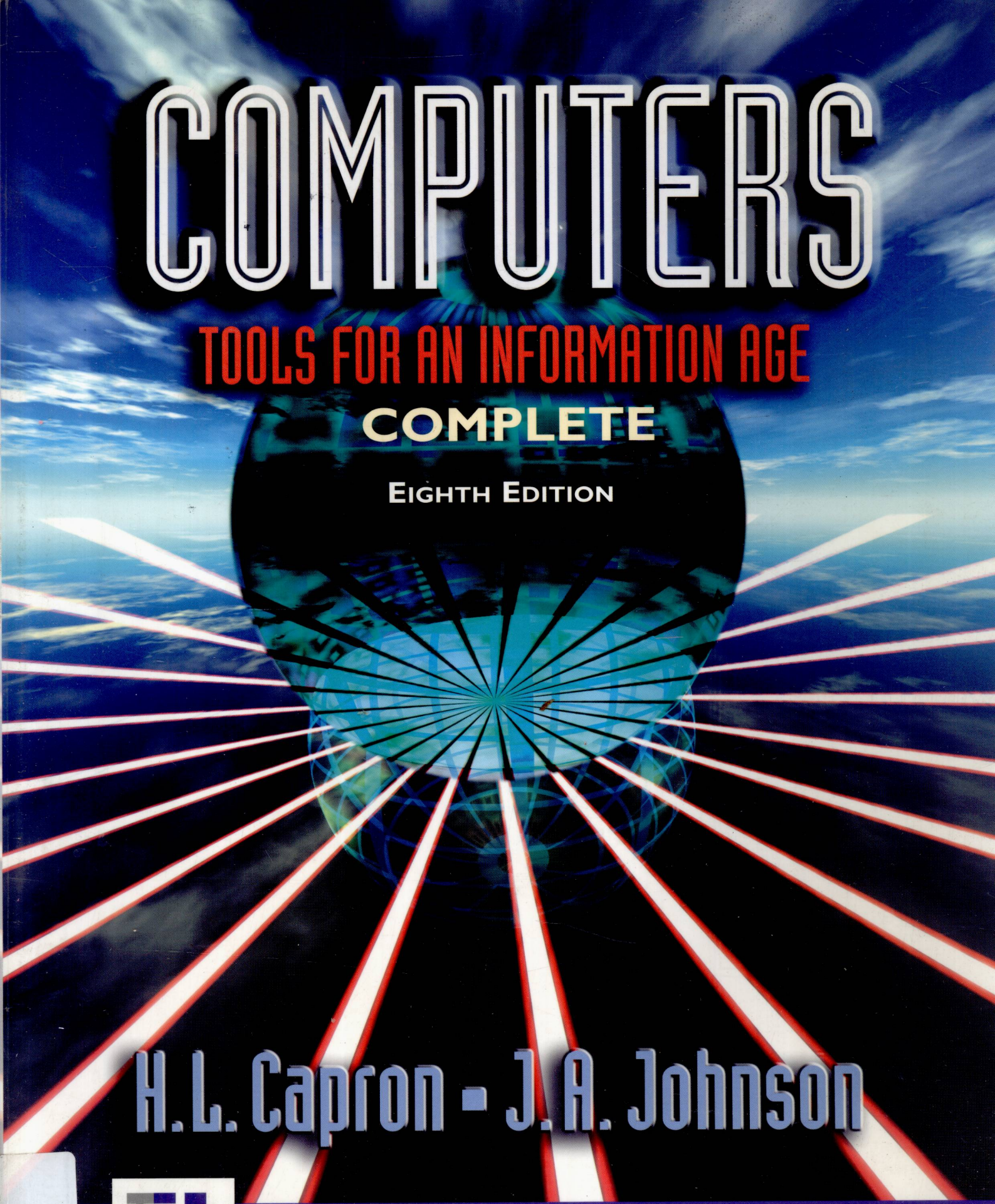

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Computers:

Tools for an Information Age

Eighth Edition

H. L. Capron
J. A. Johnson

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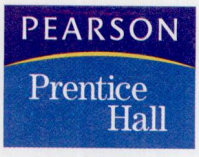

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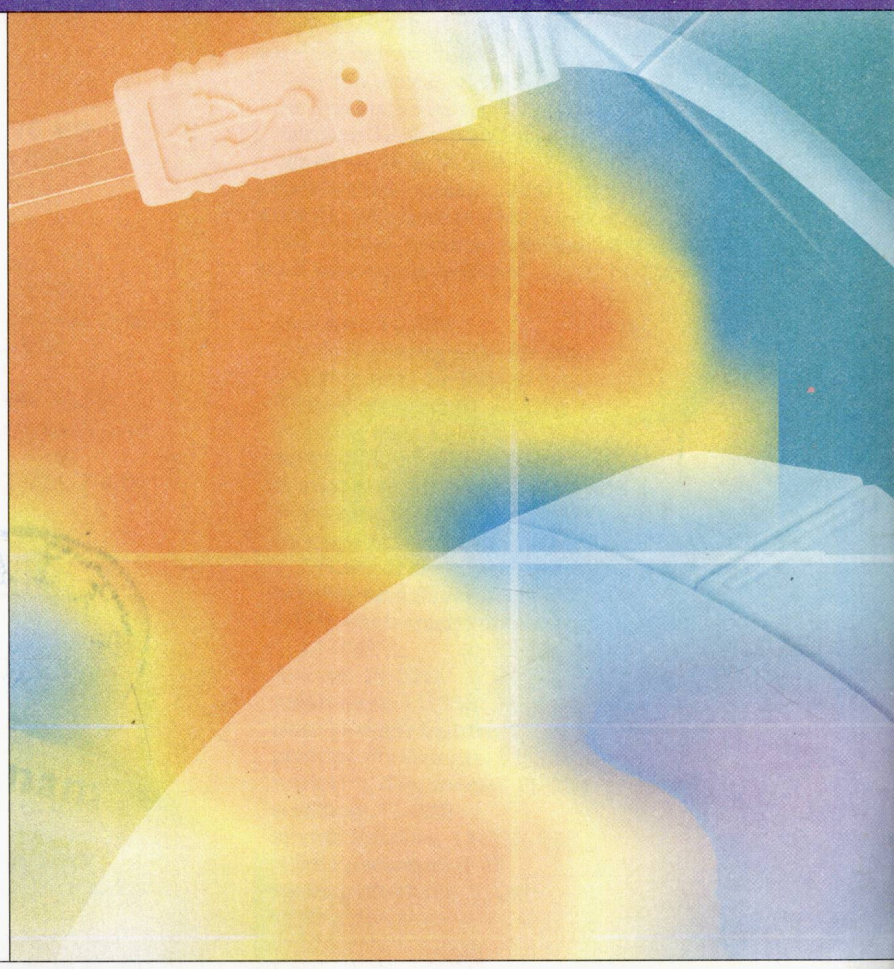

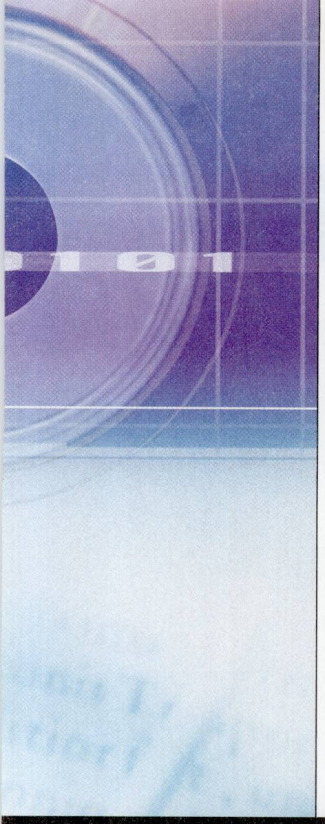

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PREFACE

J. A. Johnson and H. L. Capron have again teamed up to provide students with the most comprehensive, up-to-date introduction to computers in the eighth edition of ***Computers: Tools for an Information Age***. This edition has new coverage on the latest in microcomputer operating systems, hardware, and e-commerce, and new material on ethics and the societal impacts of information technology, to ensure that students have the most current information as they learn about today's technology.

Connectivity is paramount in today's society. In this edition, the connectivity theme is integrated into several aspects of the book. Exploring the Internet is also simplified with a basic introduction in Chapter 1, a more detailed discussion in Chapter 8, and in the Planet Internet features at the end of every chapter. In addition, Prentice Hall's Explore Generation IT Labs are included, free of charge, to give an interactive component to the course material.

CONTENT CHANGES: FOCUS ON THE INTERNET/EMERGING TECHNOLOGIES/ETHICS

CHAPTER 1. Jump-start the text with an introduction to the Internet in Chapter 1. Learn basic information about the Web, browsers, servers, and Internet protocols at the beginning and be able to use it throughout the course.

CHAPTER 8. "The Internet: At Home and in the Workplace" explains the important aspects of Internet technology from URLs to links to search engines and focuses on various aspects of business use of the Internet, particularly electronic commerce.

PLANET INTERNET. The Planet Internet feature offers a nontechnical look at various aspects of the World Wide Web in a two-page spread at the end of each chapter. Topics include places to start, global aspects of the Internet, FAQs, business, shopping, careers, privacy, multimedia, entertainment, resources, and Internet relay chat. Each Planet Internet suggests hands-on Internet exercises.

- ***Additional Internet Topics.*** Chapter 9 addresses ethical and social issues involved with the Internet and Chapter 10 discusses the security and privacy implications of the widespread use of the Internet.
- ***Multimedia.*** Whether on CD-ROM, DVD or the Internet, multimedia continues to be a major newsmaker in the computer industry. Underlying CD-ROM and DVD technology and multimedia applications are described in Chapter 6.

Features

GETTING PRACTICAL. Various topics of practical interest to students, such as using the computer as a digital darkroom to produce semiprofessional pictures, caring for diskettes and CDs, and choosing an Internet service provider, are covered in the Getting Practical boxes in each chapter.

MAKING CONNECTIONS. Links people to computers. Topics include personalizing your desktop screen, using your computer as a video telephone, updating software online, and Bluetooth communications.

MARGIN NOTES. To further engage the student, margin notes are placed throughout the text. The margin notes extend the text material by highlighting interesting computer applications. Topics include chips that see, the networked home, cyberwarfare, and the wired campus.

BUYER'S GUIDE. Students and their families are making important economic decisions about the purchase of a computer for educational, personal, and business needs. This concise guide offers information to aid in hardware and software purchases.

MAKING MICROCHIPS GALLERY. The gallery text, supplemented by color photos, describes how microprocessors are made.

DAY IN THE LIFE. This feature details the life of an IT professional within a certain area

that applies to the chapter material. Students see how the concepts they are learning in the text apply to the working world.

In-Text Learning Aids

Each chapter includes the following pedagogical support:

- ***Learning Objectives*** at the beginning of each chapter provide key concepts for students.
- ***Key terms*** appear in bold throughout the text.
- A ***Chapter Review*** offers a summary of core concepts and key terms.
- ***Critical Thinking Questions*** encourage students to discuss more thoroughly the information presented in each chapter.
- The ***Student Study Guide*** offers objective questions that test comprehension of essential concepts.
- A ***Glossary*** and a comprehensive ***Index*** are included at the end of the text.

STUDENT LEARNING SUPPLEMENTS

Prentice Hall's Explore Generation IT Labs

The Explore IT labs offer students an interactive look at computer concepts. The labs are delivered on the Web and on CD-ROM, allowing access in the classroom, the dorm, at home, and wherever computer and/or the Internet access are available.

These 16 labs have three key sections that encourage participation from students:

- ***Introduction:*** A multimedia exploration of the topic engages students and helps them fully understand the material presented in an interactive environment.
- ***Explore:*** Through further interaction and exploration of the material, students get a better understanding of the concepts in the lab.
- ***Quiz:*** Each lab includes a ten-question quiz that requires students to demonstrate an understanding of the concepts and material.

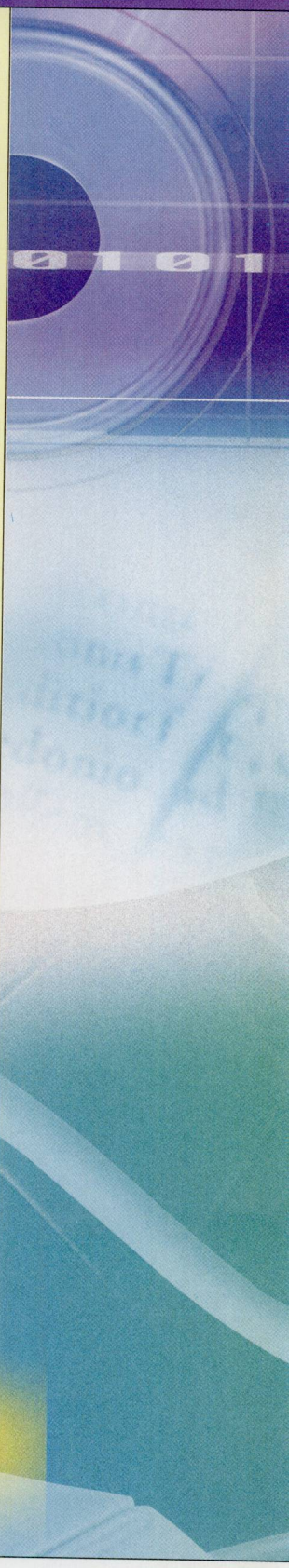
EXPLORE IT LABS cover the following hot topics:

Computer fundamentals
Mouse and keyboard
Directories, folders, and files
Troubleshooting
Computer systems
Hardware
Operating systems
Buying a computer
Computer applications
Application software
Multimedia
Databases
Internet and networking
Internet and the World Wide Web
Building a Web page
E-commerce
Building a network
Programming
Introduction to programming
Binary representation
Logic

Train and Assess Generation IT!

In addition to the traditional methods of teaching Computer Concepts, Prentice Hall proudly gives you COMPUTER CONCEPTS training modules in its wildly popular Internet-based training and testing software, ***Train and Assess Generation IT!*** This program offers interactive exploration in computer concepts topics such as

- Using e-mail
- Internet I: Overview
- Internet II: Finding what you need on the Internet
- Internet III: Connecting to the Internet from home
- File management
- Exploring the Windows interface
- Inside the box
- PC troubleshooting basics
- Working with graphics
- Buying a PC



- Installing and uninstalling software
- Security and privacy

INSTRUCTOR TEACHING SUPPLEMENTS

Instructor's Resource CD-ROM

The Instructor's Resource CD-ROM that is available with ***Computers: Tools for an Information Age, 8e*** contains:

- Instructor's Manual in Word and PDF
- Solutions to all questions and exercises from the book and Web site
- A Windows-based test manager and the associated test bank in Word format with over 1500 new questions
- PowerPoint lectures with Present IT:

  The software is a user friendly, browser-based interface, organized by chapter with search and sort functions, prebuilt PowerPoint slides and the ability to build a presentation from scratch incorporating any of the expanded content on the CD, Browse and Preview functions along with PowerPoint. You will find the following content resources in this software:

  - Multiple, customizable PowerPoint slide presentations for each chapter
  - Image library of all of the figures from the text
  - Videos with case notes
  - Animations for each chapter with audio

Tools for Online Learning

www.prenhall.com/capron

This text is accompanied by a companion Web site at www.prenhall.com/capron. This Website is designed to bring you and your students a richer, more interactive Web experience. The Website contains the following content and features:

- An interactive study guide
- Computer concepts learning games
- Internet exercises
- On-line end-of-chapter material
- Technology updates
- PC buying guide
- WWW links
- Careers in IT

ONLINE COURSEWARE FOR BLACKBOARD, WEBCT, AND COURSECOMPASS

Now you have the freedom to personalize your own online course materials! Prentice Hall provides the content and support you need to create and manage your own online course in WebCT, Blackboard, or Prentice Hall's own CourseCompass. Content includes lecture material, interactive exercises, additional testing questions, and projects.

CourseCompass (www.coursecompass.com)

CourseCompass is a dynamic, interactive online course-management tool powered exclusively for Pearson Education by Blackboard. This exciting product enables you to teach market-leading Pearson Education content in an easy-to-use, customizable format.

Blackboard (www.prenhall.com/blackboard)

Prentice Hall's abundant online content, combined with Blackboard's popular tools and interface, result in robust Web-based courses that are easy to implement, manage, and use—taking your courses to new heights in student interaction and learning.

WebCT (www.prenhall.com/webct)

Course-management tools within WebCT include page tracking, progress tracking, class and student management, grade book, communication, calendar, reporting tools, and more. Gold Level customer support, available exclusively to adopters of Prentice Hall courses, is provided free of charge upon adoption and provides you with priority assistance, training discounts, and dedicated technical support.

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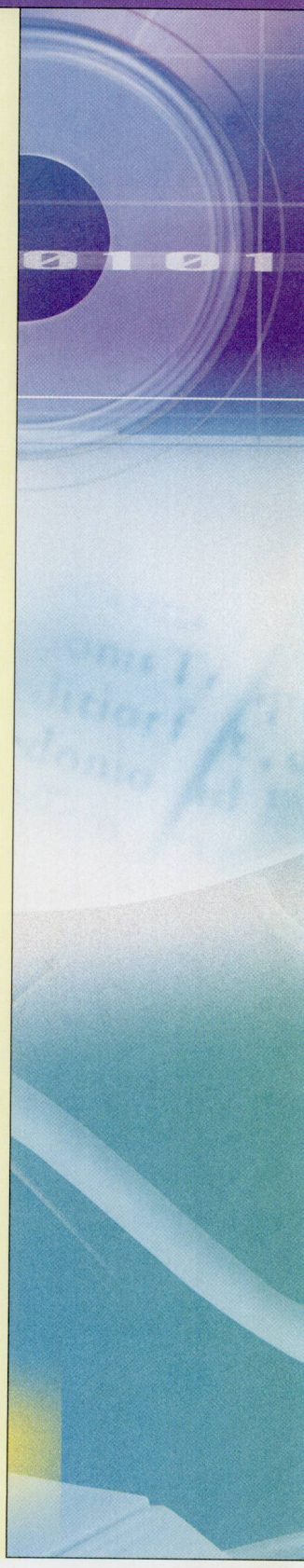

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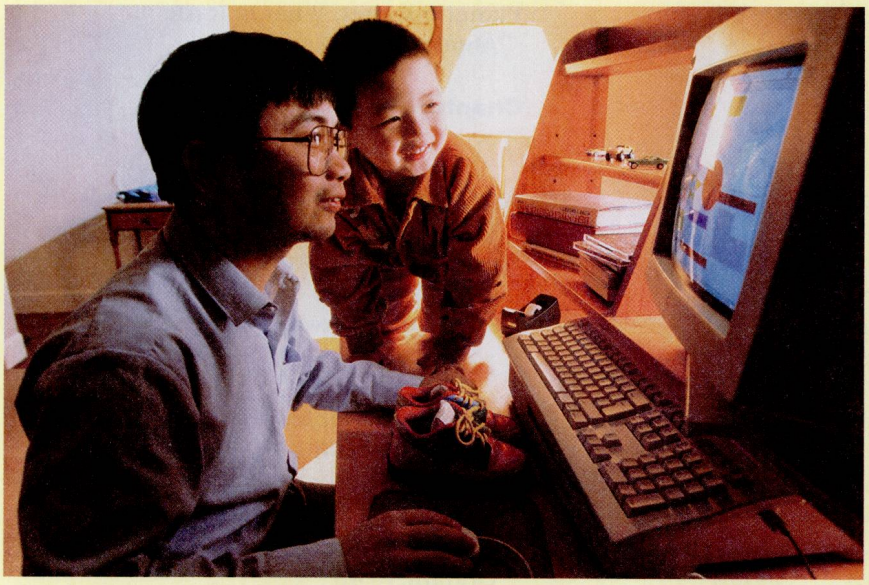

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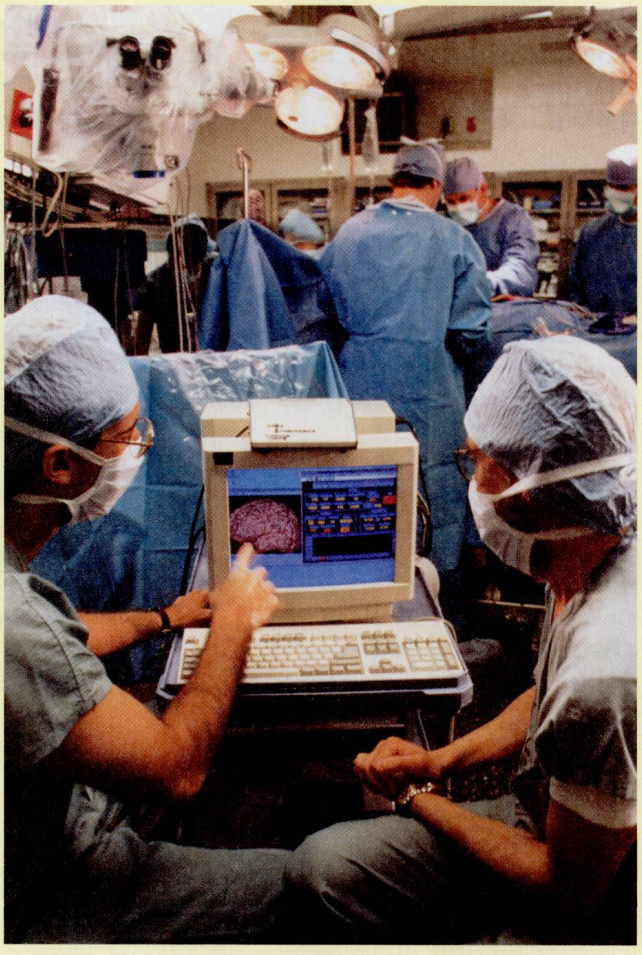

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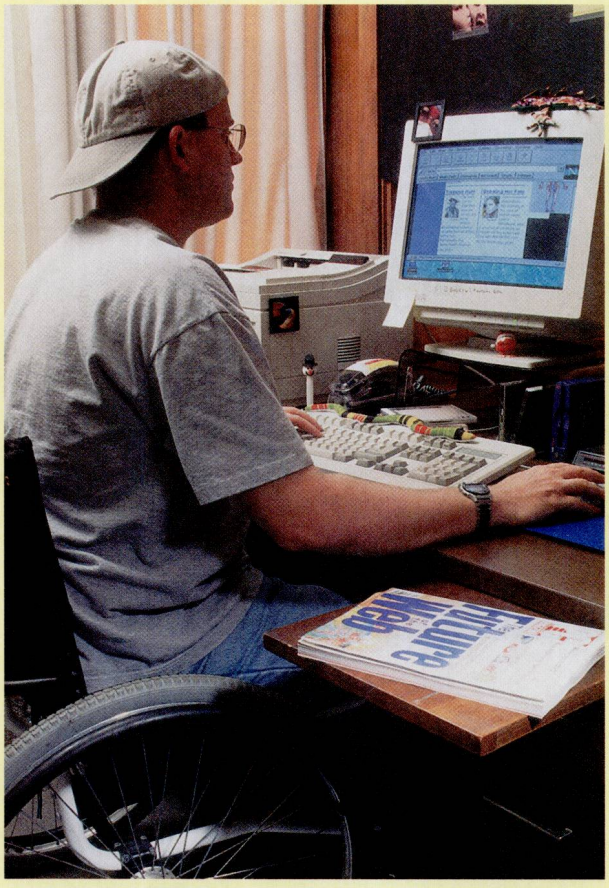

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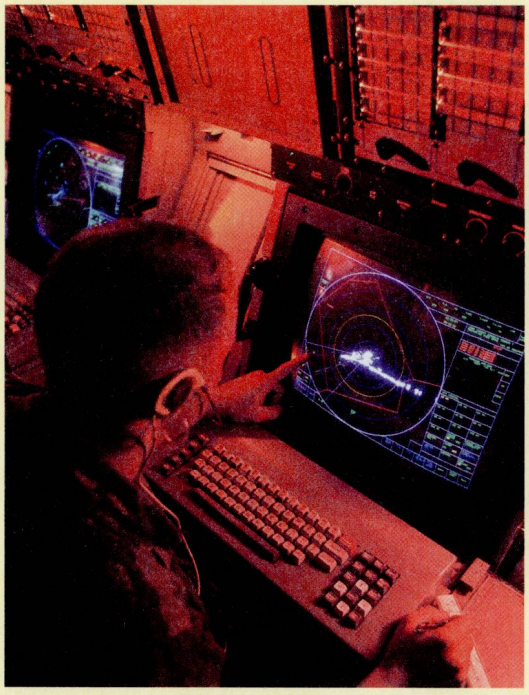

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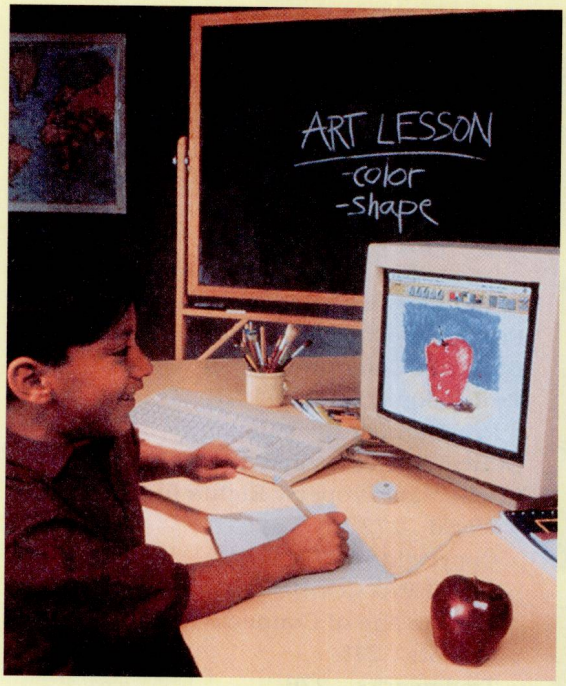

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