<<计算机科学引论>>

图书基本信息

书名:<<计算机科学引论>>

13位ISBN编号: 9787040145984

10位ISBN编号:7040145987

出版时间:2004-7

出版时间:高等教育

作者: 奥利里

页数:509

版权说明:本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com

<<计算机科学引论>>

内容概要

《计算机科学引论》概括地介绍了计算机科学与信息技术的主要领域、各种应用及其对社会的影响。

全书由15章和一些附录组成,主要内容包括:信息技术概述;因特网、万维网与电子商务;基本应用软件(包括字处理、表处理、数据库管理系统、文字和图形演示、集成化软件包等);专用软件(包括图形图像处理、音频与视频、多媒体、Web创作以及虚拟现实和专家系统等新兴应用);操作系统等系统软件;计算机系统组成部件;输入/输出及相关外部设备;外部存储设备;通信与网络技术;信息系统(包括事务处理系统、管理信息系统、决策支持系统、管理支持系统等);数据库与应用;系统分析与设计;程序设计与程序语言;与信息技术有关的社会、组织、职业、道德、法律、安全和环境等问题;计算机发展简介;个人计算机购机与升级指南等。

书中大量的图示、精心的版式设计,使各种概念、技术、设备等一目了然。

每章之后附有综合性的图示小结、重要词汇和术语列表、丰富的复习题、思考题和网上实习等。

《计算机科学引论》内容丰富,体裁新颖,叙述简练清楚,英语语言规范流畅。

书中比较全面地覆盖了计算机科学与信息技术领域中基本的名词和术语,尤其是目前十分流行和最新的一些概念和词汇。

《计算机科学引论》既可作为计算机、信息管理及相关专业计算机导论课程的教材,也可作为相应专业的计算机英语教材。

<<计算机科学引论>>

作者简介

作者:(美国)Timothy J.O'Leary (美国)Linda I.O'Leary

Chapter 1 Information Technology, the Internet, and YouInformation SystemsPeopleMaking IT Work for

<<计算机科学引论>>

书籍目录

You:Information Technology TopicsSoftwareSystem SoftwareApplication SoftwareHardwareTypes of Computers Microcomputer Hardware Data Connectivity, the Wireless Revolution, and the Internet A Look to the Future: Using and Understanding Information Technology Means Being Computer Competent Visual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 2 The Internet, the Web, and Electronic CommerceThe Internet and the WebAccessProvidersBrowsersCommunicationE-MailDiscussion GroupsMaking IT Work for You: Instant MessagingSearch ToolsSearch EnginesMetasearch EnginesSpecialized Search EnginesElectronic CommerceWeb StorefrontsWeb AuctionsSecurityWeb UtilitiesTelnetFTPPlug-insFiltersA Look to the Future: Internet2 Will Be a High-Performance Network Visual Summary Key Terms Chapter Review Using Technology Expanding Your KnowledgeBuilding Your PortfolioChapter 3 Basic Application SoftwareApplication SoftwareCommon FeaturesWeb-based ApplicationsMaking IT Work for You: Web-based ApplicationsWord ProcessorsFeaturesCaseSpreadsheetsFeaturesCaseDatabase Management SystemsFeaturesCasePresentation GraphicsFeaturesCaseIntegrated PackagesCaseSoftware SuitesSharing Data between ApplicationsCopy and PasteObject Linking and EmbeddingA Look to the Future: Web-based Application Software Updates Ease Maintenance Visual Summary Key Terms Chapter Review Using Technology Expanding Your Knowledge Building Your PortfolioChapter 4 Specialized Application SoftwareGraphicsDesktop PublishingImage EditorsIllustration ProgramsImage GalleriesGraphics SuitesAudio and VideoMultimediaLinks and ButtonsDeveloping Multimedia PresentationsMultimedia Authoring ProgramsWeb AuthoringWeb Site DesignMaking IT Work for You: Personal Web SitesWeb Authoring ProgramsEmerging ApplicationsVirtual RealityKnowledge-based (Expert) SystemsRoboticsA Look to the Future: The Future of Artificial Intelligence Is Emotional Visual Summary Key TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 5 System SoftwareSystem SoftwareOperating SystemsFeaturesCategoriesWindowsMac OSUNIX and LinuxUtilitiesWindows UtilitiesUtility SuitesMaking IT Work for You: Virus ProtectionDevice DriversA Look to the Future: IBM Builds an Aware SupercomputerVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 6 The System UnitSystem UnitElectronic Data and InstructionsBinary Coding SchemesSystem BoardMicroprocessorSpecialty ProcessorsMemoryRAMROMCMOSSystem ClockExpansion Slots and CardsMaking IT Work for You: TV Tuner Cards and Video ClipsBus LinesExpansion BusesPortsStandard PortsCablesPower SupplyA Look to the Future: Xybernaut Corporation Makes Wearable Computers a Reality Visual Summary Key Terms Chapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 7 Input and OutputWhat Is Input?Keyboard EntryKeyboardsFeaturesPointing DevicesMouseJoystickTouch ScreenLight PenScanning DevicesOptical ScannersBar Code ReadersCharacter and Mark Recognition DevicesImage Capturing Devices Digital Camera Digital Video Camera Digitizing Devices Graphics Tablets Digital Notebooks Audio Input Devices Voice Making IT Work for You: Digital Photography Music What Is Output?MonitorsFeaturesCathode-Ray TubeFlat-Panel MonitorOther MonitorsPrintersFeaturesInk-Jet PrinterLaser PrinterThermal PrinterOther PrintersAudio-Output DevicesCombination Input and Output DevicesFax MachinesMultifunction DevicesInternet TelephoneTerminalsA Look to the Future: Neural Signals Inc. Creates Brain-Machine Interface Visual Summary Key Terms Chapter Review Using Technology Expanding Your KnowledgeBuilding Your PortfolioChapter 8 Secondary StorageStorageFloppy DisksTraditional Floppy DiskHigh Capacity Floppy DiskHard DisksInternal Hard DiskHard-Disk CartridgesHard-Disk PacksPerformance EnhancementsOptical DisksCompact DiscDigital Versatile DiscMaking IT Work for You: Music from the InternetDataPlayOther Types of Secondary StorageSolid-State StorageInternet Hard DrivesMagnetic TapeA Look to the Future: Blu-Ray Technology Expected to Replace DVDVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 9 Communications and

<<计算机科学引论>>

NetworksCommunicationsConnectivityThe Wireless RevolutionCommunication SystemsCommunication ChannelsPhysical ConnectionsWireless ConnectionsConnection DevicesModemsTypes of ConnectionsData TransmissionBandwidthProtocolsNetworksTermsNetwork TypesLocal Area NetworksHome NetworksMetropolitan Area NetworksWide Area NetworksMaking IT Work for You: Home NetworkingNetwork ArchitectureConfigurationsStrategiesOrganizational Internets: Intranets and ExtranetsIntranetsExtranetsFirewallsA Look to the Future: Toyota and Sony Create Wireless Robotic CarVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 10 Privacy and SecurityPeoplePrivacyLarge DatabasesPrivate NetworksThe Internet and the WebMajor Laws on PrivacyMaking IT Work for You: Spyware RemovalSecurityComputer CriminalsComputer CrimeOther HazardsMeasures to Protect Computer SecurityErgonomicsPhysical HealthMental HealthDesignThe EnvironmentThe Green PCPersonal ResponsibilityA Look to the Future: Presence Technology Makes Finding People EasyVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 11 Information SystemsOrganizational Information FlowFunctionsManagement LevelsInformation FlowComputer-Based Information SystemsTransaction Processing SystemsManagement Information Systems Decision Support Systems Executive Support Systems Other Information Systems Case Study: Information Systems at DVD DirectA Look to the Future: Information OverloadVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 12 DatabasesDataData OrganizationKey FieldBatch versus Real-Time ProcessingDatabasesNeed for Databases Database Management DBMS Structure Hierarchical Database Network Database Relational DatabaseMultidimensional DatabaseObject-Oriented DatabaseTypes of DatabasesIndividualCompany or SharedDistributedProprietaryWeb DatabaseDatabase Uses and IssuesStrategic UsesSecurityCase Study: Databases at DVD DirectA Look to the Future: Xperanto Makes Database Searches EasierVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 13 Systems Analysis and DesignSystems Analysis and DesignPhase 1: Preliminary InvestigationDefining the ProblemSuggesting Alternative SystemsPreparing a Short ReportPhase 2: AnalysisGathering DataAnalyzing the DataDocumenting Systems AnalysisPhase 3: DesignDesigning Alternative SystemsSelecting the Best SystemWriting the Systems Design ReportPhase 4: DevelopmentAcquiring SoftwareAcquiring HardwareTesting the New SystemPhase 5: ImplementationTypes of ConversionTrainingPhase 6: MaintenancePrototyping and Rapid Applications Development Prototyping Rapid Applications Development Case Study: Systems Analysis and Design at DVD DirectA Look to the Future: Rapid ChangeVisual SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioChapter 14 Programming and LanguagesPrograms and ProgrammingWhat Is a Program?What Is Programming?Step 1: Program SpecificationProgram ObjectivesDesired OutputInput DataProcessing RequirementsDocument Program SpecificationsStep 2: Program DesignTop-Down Program DesignPseudocodeFlowchartsLogic StructuresStep 3: Program CodeThe Good ProgramCodingStep 4: Program TestSyntax ErrorsLogic ErrorsTesting ProcessStep 5: Program DocumentationStep 6: Program MaintenanceOperationsChanging NeedsCASE and OOPCASE ToolsObject-Oriented Software DevelopmentGenerations of ProgrammingLanguagesMachine Languages: The First Generation Assembly Languages: The Second Generation High-Level Procedural Languages: The Third GenerationProblem-Oriented Languages: The Fourth GenerationNatural Languages and Visual Programming Languages: The Fifth GenerationCase Study: Programming at DVD DirectA Look to the Future: MI-tech Takes the Pain Out of Programming Visual Summary Key Terms Chapter Review Using Technology Expanding Your KnowledgeBuilding Your PortfolioChapter 15 Your Future and Information TechnologyChanging Times Technology and Organizations New Products New Enterprises New Customer and Supplier RelationshipsTechnology and PeopleCynicismNaiveteFrustrationProactivityHow You Can Be a WinnerStay CurrentMaintain Your Computer CompetencyMaking IT Work for You: Locating Job Opportunities OnlineDevelop Professional ContactsDevelop SpecialtiesBe Alert for Organizational ChangeLook for Innovative Opportunities A Look to the Future: Maintaining Computer Competency and Becoming Proactive Visual

<<计算机科学引论>>

SummaryKey TermsChapter ReviewUsing TechnologyExpanding Your KnowledgeBuilding Your PortfolioThe Evolution of the Computer AgeThe Buyer's Guide: How to Buy Your Own Microcomputer SystemThe Upgrader's Guide: How to Upgrade Your Own Microcomputer SystemAppendixGlossaryCreditsIndex

<<计算机科学引论>>

章节摘录

插图:The purpose of this book is to help you become competent in computer-related skills. Computer competency: This notion may not be familiar to you, but it's easy to understand. Specifically, we want to help you walk into a job and immediately be valuable to an employer. In this chapter, we first present an overview of an information system: people, procedures, software, hardware, and data. Competent end users need to understand these basic parts and how connectivity through the Internet and the Web expands the role of information technology (IT) in our lives. In subsequent chapters, we will describe these parts of an information system in detail. Fifteen years ago, most people had little to do with computers, at least directly. Of course, they filled out computerized forms, took computerized tests, and paid computerized bills. But the real work with computers was handled by specialists-programmers, data entry clerks, and computer operators. Then microcomputers came along and changed everything. Today it is easy for nearly everybody to use a computer. Now: Microcomputers are common tools in all areas of life. Writers write, artists draw, engineers and scientists calculate-all on microcomputers. Students and businesspeople do all this, and more. New forms of learning have developed. People who are homebound, who work odd hours, or who travel frequently may take courses on the Web. A college course need not fit within the usual time of a quarter or a semester. New ways to communicate, to find people with similar interests, and to buy goods are available. All kinds of people are using electronic mail, electronic commerce, and the Internet to meet and to share ideas and products. What about you?

How are you using information technology?

Many interesting and practical uses have recently surfaced to make our personal lives richer and more entertaining. These applications range from recording digital video clips to creating personalized Web sites. Competent end users need to know the five parts of an information system: people, procedures, soft-ware, hardware, and data. Additionally, they need to understand connectivity, the wireless revolution, the Internet, and the Web and to recognize the role of in-formation technology in their professional and personal lives.

<<计算机科学引论>>

编辑推荐

《计算机科学引论(2005影印版)》是由高等教育出版社出版。

<<计算机科学引论>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com