



走近网络世界

主 编 \ 鲁励夫

休闲书屋丛书 / 英汉对照
丛书主编 / 谢艳明



全国优秀出版社
武汉大学出版社

学院图书馆

4

图书在版编目(CIP)数据

走进网络世界/鲁励夫主编. —武汉: 武汉大学出版社, 2003. 10
(英汉对照·休闲书屋丛书/谢艳明主编)
ISBN 7-307-03918-4

I. 走… II. 鲁… III. 英语—对照读物, 计算机网络—英、汉
IV. H319.4:TP

中国版本图书馆 CIP 数据核字(2003)第 019389 号

责任编辑: 黄朝昉 责任校对: 汪春花 版式设计: 支 笛

出版发行: 武汉大学出版社 (430072 武昌 珞珈山)
(电子邮件: wdp4@whu.edu.cn 网址: www.wdp.whu.edu.cn)

印刷: 武汉市科普教育印刷厂

开本: 850×1168 1/32 印张: 8.875 字数: 218 千字

版次: 2003 年 10 月第 1 版 2003 年 10 月第 1 次印刷

ISBN 7-307-03918-4/H·300 定价: 13.50 元

版权所有, 不得翻印; 凡购买我社的图书, 如有缺页、倒页、脱页等质量问题,
请与当地图书销售部门联系调换。

前 言

当今世界,人们将地球称作“小小的村落”,而使得地球变小的真正原因就是人类建立了联通世界各地的互联网。互联网将地球村民紧紧连在一起,我们学习、工作、娱乐等等都离不开互联网。互联网产生何时何地,如何发展,对未来的社会将带来多大的影响?本书将带您走进 IT 世界,为您简要介绍信息技术的产生和发展,并和您一道憧憬信息技术给我们创造的美好明天。

本书的开篇当然离不开介绍电脑的基本常识。严格意义上讲,我们平时所讲的电脑,其实只是电脑的一种,即 IBM 兼容型个人计算机,简称 IBM PC。因为第一台这种电脑是由 IBM 公司在 1981 年设计制造的,从那之后,短短十几年的时间,个人电脑以前所未有的速度在世界各地普及推广,已经成为当今社会最基本的信息存取工具。然而,谁能想象,50 多年前发明的第一台电脑却是一个重 30 吨的庞然怪物?技术的革新使得电脑变得越来越小,越来越实用。第二代电脑以晶体管作为逻辑单元,体积小、重量轻、耗电少、运算快、工作可靠,结构上也更趋于实用。第三代电脑采用集成电路,将成千上万个晶体管电路做在只有几平方毫米的芯片上,以集成电路作为逻辑元件。这种电脑与前二代电脑相比,体积大为缩小,耗电极少,可靠性与运算速度也明显提高。

电脑技术的飞速发展大大地推动了信息技术的革命,也将人类的生活推向一个更新的高度。将个人电脑互相连接起来,以达到资源共享,为此目的,科学家们开发了互联网(Internet),或称因

特网。Internet 是全世界最大的计算机网络,它起源于美国国防部高级研究计划局(ARPA)于1968年主持研制的用于支持军事研究的计算机实验网 ARPANET。近年来,Internet 规模迅速发展已经覆盖全世界的各个国家,连接的网络主机达千万台,并且以每年15%—30%的速度增长。信息技术的迅猛发展还推动了人工智能和无线通讯的研究和开发,使得我们的生活更轻松,更有趣。

本书采用最新的语言材料,具有知识性、趣味性,而且语料新颖,可读性强,阅读本书,您既可以提高英语水平,也可以增长电脑知识。

目 录

CONTENTS

前言	1
----------	---

Part I 回顾与展望 (Review and Prospect)

1. Brief History of Computer	1
一、计算机发展简史	4
2. Structure of a Microcomputer	7
二、微型计算机的结构	9
3. Computer Software and Programming	12
三、计算机软件及程序编制	14
4. Computer Applications	17
四、计算机应用	19
5. What is Windows?	21
五、什么是“视窗”	22
6. Brief History of Internet	24
六、因特网的发展简史	27
7. Brief Introduction to Yahoo!	30
七、雅虎简介	32

.....	1
-------	---

Part II 重要人物与事件(Significant People and Events

1. From a Librarian to America's Richest Man	34
一、从图书管理员到世界首富	36
2. Direct from Dell	38
二、戴尔直销	40
3. The Coming back Kids	42
三、比尔·盖茨东山再起	43
4. Employees Needed for the E-era	46
四、E时代需要的员工	48
5. Speech at Microsoft Professional Developers Conference	50
五、在微软专业开发人员大会上的演讲	52
6. Why does Cui Qi not Use the Computer?	54
六、崔琦为何不用电脑?	56
7. A Lesson from the Toshiba's "Patch"	58
七、东芝“补丁”的教训	61
8. Breakup of Microsoft Empire	64
八、微软帝国的分裂	65
9. HP Acquiring Compaq Turns out a Success	67
九、惠普成功收购康柏	70
10. A Cold War in Cyberspace	73
十、电子网络的冷战	76

Part III 网上趣闻(Internet Anecdote)

1. A Lost Dream in America	78
一、失落的美国梦	81
2. NOKIA — Voice from Finland	83

二、诺基亚——来自芬兰的声音	85
3. What's Meaning of @ in the E-mail	88
三、E-mail 地址中的符号@ 是什么意思	89
4. The Most Notorious Hacker — Kevin Mitnick	91
四、最臭名昭著的黑客祖师——凯文·米特尼	93
5. Internet may Cause Depression	96
五、因特网会导致抑郁	97
6. Successful and Unique Silicon Valley	99
六、成功而又独特的硅谷	103
7. The E-mail Comes from Heaven	106
七、天堂来信	107
8. "I don't believe it."	108
八、“我不相信它”	109
9. Research: the Digital Polarization	110
九、调查:数字极化	113

Part IV 互联网的应用 (Internet Application)

1. Office Automation	116
一、办公自动化	119
2. Office Software	121
二、办公软件	123
3. Don't be Afraid of your Computer	125
三、不要害怕电脑	129
4. I-book Application in the Future	132
四、网络书籍在未来的应用	133
5. The Ascendancy of the Net Economy	135
五、网络经济方兴未艾	138
6. E-English Rules the Waves	141

六、网上英语统治潮流	143
7. What's Computer Virus	145
七、什么是计算机病毒	147
8. Classification and Eradication of Viruses	149
八、计算机病毒分类与防治	151
9. "I Love You" No!!!	154
九、“我爱你。”不!!!	156
10. What's "Bug"	158
十、什么是计算机臭虫	159

Part V 网络与生活 (Network and Life)

1. What can Internet Do for us?	161
一、因特网能为我们做什么?	164
2. E-Business Give More Chance and Challenge	167
二、电子商务的机遇与挑战	169
3. Shopping Online	171
三、网上购物	172
4. Let your Fingers Do the Shopping	174
四、用手指购物	176
5. Digital Wallets	178
五、数字钱包	180
6. Web Chat	182
六、网上聊天	185
7. Auction Online	188
七、网上拍卖	189
8. Online Courses	191
八、网上课程	192

Part VI 电子娱乐与多媒体

(Electronics Entertainment and Multimedia)

1. Video Game Wars	194
一、电子游戏争霸战	197
2. Play Games for a Living	200
二、玩游戏来谋生	202
3. Find yourself in the Net	204
三、在网络中看到自己	205
4. What's Multimedia	207
四、什么是多媒体	208
5. What does the Multimedia Actually Mean?	210
五、“多媒体”到底意味着什么?	213
6. Palmtop Computer	216
六、掌上电脑	218

Part VII 数字通信 (Digital Telecommunication)

1. The Development of Paging System	220
一、寻呼系统的发展	222
2. Global System for Mobile Communication	224
二、全球移动通信系统	227
3. Integrated Services Digital Network	229
三、综合业务数字网	231
4. Introduction to Optical Fiber Communication	233
四、光纤通信介绍	235
5. Information Superhighway	237
五、信息高速公路	239
6. The Next Generation of Telephones	242

六、下一代电话	244
7. Get Smaller, Faster and Better	245
七、更小更快更强	248
8. Dial and you shall See	250
八、拨通即可看见	252

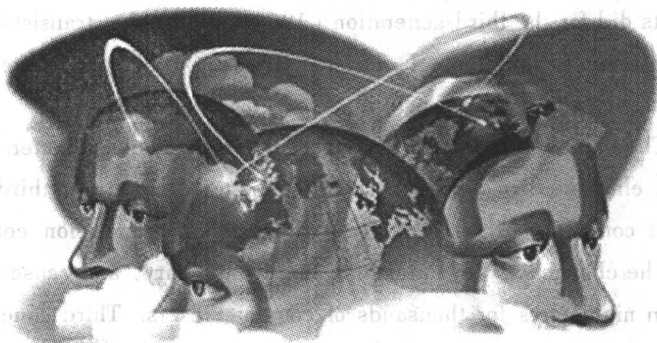
计算机英语名词简释

一、著名计算机公司	253
二、常见硬件名和设备名	254
三、著名软件产品	257
四、著名的计算机语言	262
五、常见的重要电脑英语及其缩写	263

Part I Review and Prospect 第一部分 回顾与展望

1. Brief History of Computer

The most prominent feature of the ENIAC, vacuum tubes, characterized the first generation of computers (1946—1959). Through 1950, several other notable computers were built, each contributing significant advancements, such as binary arithmetic, random access and the concept of stored programs. These computer concepts are common in today's computers.



To most people, the invention of the transistor meant small portable radios. To those in the data processing business, it signaled

the start of the second generation of computers (1959—1964). The transistor meant more powerful, more reliable, and less expensive computers that would occupy less space and give off less heat than did vacuum-tube-powered computers.

The expense item should be emphasized. The cost of an early computer represented a significant portion of a company's budget. Computers were expensive. Cost per instruction executed can be used to compare the cost of computers over the last three decades. Significant innovations, spurred by intense competition, have resulted in enormous increases in computer performance and substantial reductions in price. This trend, established with the introduction of second-generation computers, continues today.

What some computer historians consider to be the single most important event in the history of computers occurred when IBM announced their System 360 line of computers on April 7, 1964. The System 360 ushered in the third generation of computers. Integrated circuits did for the third-generation (1964—1971) what transistors did for the second generation. The System 360s and other third-generation computers made all previously installed computers obsolete.

The compatibility problems of second-generation computers were almost eliminated in third-generation computers. However, third-generation computers differed radically from second-generation computers. The change was revolutionary, not evolutionary, and caused conversion nightmares for thousands of computer users. Third-generation computers work so quickly that they provide the capability to run more than one program concurrently. For example, at any given time the computer might be printing payroll checks, accepting orders, and testing progress.

Most computer vendors classify their computers as being in the fourth generation of computers, and a few call theirs the “fifth generation”. The first three generations were characterized by significant technological breakthroughs in electronics — the use of vacuum tubes, then transistors, and then integrated circuits. Some people prefer to pinpoint the start of the fourth generation as 1971, with the introduction of large-scale integration of electronic circuitry. However, other computer designers argue that if we accept this premise, then there would probably have been a fifth, a sixth, and maybe a seventh generation since 1971.

The base technology of today's computers is still the integrated circuit. This is not to say that two decades have passed without any significant innovations. In truth, the computer industry has experienced a mind-boggling succession of advances in the further miniaturization of circuitry, data communications, the design of computer hardware and software, and input/output devices.

One of the most significant contributions to the emergence of the fourth generation of computers is the microprocessor. The microprocessor, which can be contained on a single silicon chip, is a product of the microminiaturization of electronic circuitry. The first fully operational microprocessor, sometimes called a “computer on a chip,” was invented in 1971. Today, there are more microprocessors on Earth than there are people. This device costs less than a soft drink and can be found in everything from elevators to satellites.

We may have defined our last generation of computers and begun the era of generation less computers, even though computer manufacturers talk of “fifth”- generation and “sixth”-generation computers, this talk is more a marketing play than a reflection of reality.

Advocates of the concept of generation fewer computers say that even though technological innovations are coming in rapid succession, no single innovation is, or will be, significant enough to characterize another generation of computers.

【注】ENIAC = Electronic Numerical Integrator And Calculator 电子数字积分器和计算器 ENIAC 计算机(第一台通用电子数字计算机的名字)

【参考译文】

一、计算机发展简史

以真空管为显著特征的 ENIAC 标志着第一代计算机(1946 ~ 1959), 1950 年, 又制造出了几台著名计算机, 而且每一台都取得了很大的进展, 如二进制运算、随机存取和存储程序的概念, 这些概念在当今的计算机中仍被普遍使用。

晶体管的发明对大多数人来说是指小型袖珍收音机, 但对从事数据处理业务的人则表明第二代计算机(1959 ~ 1964) 的开端。晶体管意味着功能更强、更可靠、更价廉的计算机, 它与以真空管为动力的计算机相比占用空间小, 产生的热量也小些。

如果强调一下费用问题的话, 早期计算机的成本占公司预算的很大一部分。计算机以前是很昂贵的, 过去三十年曾以执行每条指令的费用来衡量计算机的价格。由激烈的竞争所带来的重大革新结果导致了计算机效能的猛增和价格的降低, 这一趋势在第二代计算机出现时就形成了, 并且至今仍在继续。

1964 年 4 月 7 日, 当 IBM 公司推出他们的 360 系列计算机时, 一些计算机史学家认为这是计算机历史上一个最大的事件。

360 系列迎来了第三代计算机(1964 ~ 1971),第三代计算机中的集成电路替代了第二代计算机中的晶体管。360 系统和其他第三代计算机使以前安装的所有计算机变得陈旧了。

第三代计算机基本上解决了第二代计算机中的兼容性问题。然而,第三代计算机与第二代有本质上的差别,其变化是完全、彻底的,而不是在此基础上的改良,这一变化使得成千上万计算机用户惊慌失措。第三代计算机工作非常迅速,它们具备同时运行多个程序的能力。例如,任何时刻,一台计算机既可打印工资单,同时又可接收订单,也可检测工作进度。

目前,大多数计算机销售商将他们的计算机归作第四代计算机,也有一些将它们归作第五代。前三代计算机是以电子学技术的重大突破为标志,即依次使用电子管、晶体管和集成电路。有些人主张把推出大规模集成电路的 1971 年作为第四代计算机的起点,但是,另外一些计算机的设计者则对此有争议,他们认为如果承认这一前提,则在 1971 年以后就应有第五代、第六代,甚至第七代计算机。

当代计算机的基本技术仍然是集成电路,但这不是说这二十年来没有任何重大革新。事实上,计算机工业在电路的进一步小型化,数据通信、计算机硬件和软件的设计以及输入/输出设备等方面经历了连续的令人眼花缭乱的进步。

为第四代计算机问世所作出的最重要的贡献之一就是微处理器。一个硅片便可包容的微处理器是电子电路超微型化的产物。第一个完全能运行的微处理器,有时也称单片机,是 1971 年问世的。现在,全世界拥有的微处理器数量已超过人口数。这种器件的价格比一杯饮料还便宜,而且从电梯到人造卫星到处可见。

我们可能已为最后一代计算机做了定义,并且开始了无代计算机时代。尽管计算机厂家大谈第五代、第六代计算机,但这种说

法更带有商业性,并不反映实际情况。赞成无代计算机概念的人认为,即使技术进步接踵而来,也不可能有哪一种技术足以成为新一代计算机的标志。

2. Structure of a Microcomputer

There are many types of microcomputers. Here, we will use an IBM Personal Computer (PC) to illustrate the primary components of a microcomputer. Other brands and models of microcomputers exhibit difference in appearance and operations. The primary hardware components of an IBM PC are the main frame, the monitor, the keyboard, and many peripherals such as the disk drive, hard disk, printer, and mouse, all of which are hardwired to the main frame. The main frame is the heart of a microcomputer system. It contains the Central Processing Unit (CPU), a chip that controls the major operations of the computer and the main memory.

CPU is the abbreviation of Central Processing Unit, which is the heart of a computer like the head of a family. Once the power of a computer is turned on, all the behaviors are under the control of CPU. CPU is in an iron box together with other devices such as disk drives, a main memory and a switching power supply etc. In Chinese, the iron box is conventionally called the mainframe. On the back of the mainframe box, there are various ports, with which CPU may be linked with input and output devices.

Primary memory is known as random access memory (RAM) and simple named memory. It is the storage area within the computer that holds programs and data during processing. Memory is only temporary