



“十一五”高等院校软件技术专业规划教材

Profession English for Computer Science

计算机专业英语

● 主编 韩玉民

河南科学技术出版社

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Introduction

This is a computer English textbook especially compiled for software engineering and its associated majors. It mainly introduces the computer practical techniques and software tools with compressive computer knowledge and simple language.

There are 19 chapters, each one is about one professional course or one professional technology, which covers the basic principles and technologies of hardware system, software technique, data structure, database, computer network, software development and the application etc. Every chapter consists of English text, key words and phrases, notes to complicated sentences, the exercises and reading material etc., convenient for learning and improving the result. The Chinese translations for the texts are attached to the book for the learners' reference.

This book can be employed as the textbook for software engineering and its associated majors of higher schools and colleges, and also as the textbook for training software technicians and those who study software development independently, and for the software engineers.

本书是专门为软件技术及相关专业编写的计算机专业英语教材,课文内容全面,在介绍基本知识的基础上侧重实用技术和工具的介绍,语言浅显易懂。

本书共 19 章,每一章对应计算机软件技术专业的一门专业课程或一项专业技术的内容,涵盖了计算机硬件系统、软件技术、数据结构、数据库、计算机网络、软件开发和应用等基本原理和技术。每课由英文课文、关键词汇、复杂语法注释、练习题、阅读材料等部分组成,书后附有课文的参考译文,供读者参考。

本书可作为高职高专软件技术及相关专业计算机英语教材,也可作为软件技术类人才培训和软件开发自学者的教材,并可供软件工程人员学习使用。



编写说明

BIANXIESHUOMING

近年来,我国国民经济快速发展,信息产业更是突飞猛进,再加上国际化软件技术专业人才的巨大市场需求,都为软件技术专业人才的培养提供了强大的驱动力。2001年12月,教育部与国家计划经济委员会联合提出了建立35所国家示范性软件学院的决定,并于2003年又批准35所高职高专院校为示范性软件职业技术学院。除此之外,各省又相继成立了一批软件学院或软件职业技术学院。目前,这些高校已成为高等职业教育的一个重要组成部分,培养了大批优秀的软件技术专业人才,为我国软件产业的可持续健康发展提供了强有力的支撑。

教材的建设对人才培养起着至关重要的作用。就如何做好课程体系的建设和人才培养工作,中国计算机学会教育委员会、高等学校计算机教育研究会联合组建的“中国计算机科学与技术学科教程2002研究组”推出的《中国计算机科学与技术学科教程2002》给出了16门核心课程描述,建议以此构建专业人才的公共平台;2006年,高等学校计算机教育研究会结合高职院校计算机教育的特点,又推出了《中国高职院校计算机教育课程体系》蓝皮书,给出了目前流行的计算机类各专业的参考课程体系架构。目前,国内各出版机构围绕这两本书出版了很多软件类教材,但是多偏重于编程语言理论的教学,大多为传统的教学模式,结果导致学生的编程设计能力和应用能力不够。为此,河南科学技术出版社组织郑州大学、河南大学、中原工学院、郑州轻工业学院、南阳理工学院、平顶山学院等省内软件技术学院教学一线的教师及软件开发公司具有丰富经验的工程技术人员共同编写了一批教材,共包括理论课教材20种,实训课教材13种。

本套教材以《中国计算机科学与技术学科教程2002》和《中国高职院校计算机教育课程体系》蓝皮书为

指导,以“就业为导向、能力为本位”要求为原则,以“淡化理论,强化能力,体现创新,灵活多用”为出发点,突出实际动手能力和实用性,突出案例和任务驱动等技能训练。为了培养外向型软件技术专业人才,还编写了《计算机专业英语》、《计算机专业日语》。

为满足不同学校、不同层次、不同基础水平进行教学安排和人才培养的实际需要,本套教材尽量采用富有弹性的模块化内容结构,对知识传授与能力培养采用有目的的整合、融合和综合的编写方法,将若干知识点组成模块,每个模块既是教材的有机组成部分,又是一个相对完整而开放的单元,以便于教师组织教学与学生自主学习。

同时,本套教材具有系列化、立体化特征,即在编写教材的同时,开发出一些好的电子课件,通过教学资源库、课程网站等供老师、学生使用。

本套教材既适合作软件学院、软件职业技术学院以及计算机相关专业的本、专科生教材,也可作为实训机构的培训教材和相关技术人员的学习参考书。

要编写一套推动和促进应用型人才培养的教材是一项艰巨的任务,加上软件技术专业的招生时间还比较短,可以借鉴的经验不多,尽管编审委员会与各位专家都已尽力,恐仍存在疏漏之处,恳请各位读者批评指正。

郑州大学软件技术学院 王世卿
2008 年 1 月

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Preface

As we know, new computer technologies and main software development tools basically come from abroad, especially English is the language of all software programming languages, so computer English is an important tool for software technicians and is a required course for computer students and its associated majors. With good computer English, one can master new software technique and development tools quickly and can make software get double result and can improve his ability of computer English, software development and competition in the world.

To meet the needs of training the software technicians, this book is compiled based on the authors' years of teaching experiences of computer English and other courses of computer major. It is compiled for the students of software engineering and its associated majors. This book has the following characteristics:

- ◆ Comprehensive knowledge with an emphasis on the software. This book covers the basic knowledge of computer technology all-round and in general it lays an emphasis on software engineering.

- ◆ Novel contents facing to application. On the basis of professional knowledge, all the texts emphasize the practicality and update techniques. The contents of the book are chosen from the latest English computer textbooks, technical articles and Internet, e. g. about hardware, it mainly introduces new PC technologies, while about software it mainly introduces the popular software development technique and tools.

- ◆ Various exercises and expanded reading. Around the texts' topic, various exercises are available; important

and difficult points are closely linked with and more attention are paid to professional technical terms so that the learners can lay a firm foundation of computer English as soon as possible. After each lesson there is a corresponding reading material, introducing the practical hardware products and software technique or tools. By doing so, the learners can expand their computer knowledge while improving their reading ability.

There are 19 chapters (30-50 periods are suggested.), which can be grouped into four parts: chapter 1-6, about computers' hardware; chapter 7-13, about software techniques and the application; chapter 14-17, about computer network and the application; chapter 18-19, about the application of computer. One chapter is one lesson with independent content, so it's convenient for teaching arrangement. Following the text, there are key words and phrases, notes to the complicated sentences, the exercises and reading material and so on, so it's also convenient for students to learn and practise. Every reading material introduces the current leading software or hardware products, software technique or tools which have close combination with the text, so they are very practical and helpful for students to master the practical technique and expand their knowledge. The Chinese translation is attached to the book for learners to refer.

The compilers are Han Yumin, Dou Guiqin, Wang Chunxia, Wang Lu and Zhou Huanling, who come from Zhong Yuan University of Technology, and Yuan Yujie, who comes from Sanmenxia Vocational and Technical College. Yuan Yujie compiles chapter 1, 4, 5 and 6; Dou Guiqin, chapter 8, 9, 15 and 17; Wang Lu, chapter 11, 16 and 19; Wang Chunxia, chapter 12, 13 and 18; the others are done by Han Yumin; notes to grammar are made by Zhou Huanling. The whole book is checked and revised by Han Yumin.

During the compiling, Dr. Che Zhanbin, the dean of software college of Zhong Yuan University of Technology, has offered great supports. Besides, many textbooks and materials have been quoted and referred, so here deliver our sincere gratitude.

Since computer technology is developing very quickly, and both our knowledge and time are limited, unavoidably there are still some errors and inappropriateness, please criticize and correct them.

Compilers

June, 2008

由于计算机新技术和主要开发工具基本上都来自国外,特别是软件开发语言都是采用英语,新的软件开发技术文章和开发工具“联机帮助”也几乎都是英文。所以计算机专业英语是软件技术人员的一个重要工具,也是计算机及相关专业的一门必修的重要课程。掌握好计算机专业英语可以快速掌握新的软件技术和开发工具,使软件开发事半功倍,并可提高个人的专业英语能力、开发能力和国际竞争力。

本书根据作者多年的计算机专业英语和专业课程教学经验,基于软件技术人才培养需求编写,主要面向软件技术及相关专业学生。本书有以下特色:

◆ 选材全面,侧重软件。内容较全面地涵盖了计算机技术的基础知识,总体上侧重于软件技术。

◆ 面向应用,内容新颖。在介绍基本的专业知识的基础上,课文内容强调实用性和先进性,取材于近几年的英文教材、技术文章和网络文档,如硬件主要介绍新的 PC 机技术,软件主要介绍流行的软件开发技术和开发工具。

◆ 练习丰富,拓展阅读。围绕课文主题提供多种形式的练习,紧扣重点难点,注重专业术语操练,使学习者尽快夯实专业英语基础。每一课都有与课文对应的阅读材料,介绍实用的硬件产品、软件技术或工具,使学习者在提高阅读能力的同时,拓展专业知识面。

本书共 19 章(参考学时为 35~50 学时),大致可以分为四个部分。第 1~6 章为计算机硬件部分,第 7~13 章为软件技术及应用,第 14~17 章为计算机网络及应用,第 18~19 章为办公自动化和多媒体技术。每章为一课,内容基本独立,便于教学安排。课文后有关键词汇、复杂语法注释、练习题、阅读材料等,便于学生学习和练习。每章的阅读材料都是当前主流软硬件产品、软件技术或工具的介绍,与课文内容紧密结合,实用性强,有利于学生掌握实用技术和拓展知识面。最后附有课文的参考译文,供读者学习参考。

参加本书编写的有中原工学院的韩玉民、窦桂琴、王璐、王春霞、周焕灵,三门峡职业技术学院的苑玉洁。其中,苑玉洁编写第 1、4、5、6 章,窦桂琴编写第 8、9、15、17 章,王璐编写第 11、16、19 章,王春霞编写第 12、13、18 章,其余由韩玉民编写。英文语法注释由周焕灵完成。全书由韩玉民统稿。

本书在编写过程中,得到了中原工学院软件学院院长车战斌博士的大力支持,此外,书中引用和参阅了许多教材和资料,在此向其作者一并致以诚挚的谢意。

由于计算机技术发展迅速,编者限于水平,且时间仓促,难免有错误和不当之处,敬请读者批评指正。

编者

2008 年 6 月

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