IT专业英语

IT Professional English

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高等学校电子信息类"十二五"规划教材

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内 容 简 介

本书是编者多年从事 IT 专业英语教学和研究的经验总结。本书的编写目的是使读者通过学习系统地了解和掌握基本工作和 IT 领域常用的专业词汇，能够使用英语进行基本技术沟通、解答常见 IT 类技术咨询问题，进一步提高阅读、理解和翻译 IT 专业文献和各种实用性英语技术文档的能力，并以英语为工具，获取专业所需要的信息，且具有一定的专业文章写作能力。

全书分为三大部分，共二十二个单元。第一部分是关于 IT 专业的几类常用的实用文档写作，内容涉及简历、面试、职务、电邮、技术报告和研究报告。第二部分是关于 IT 的基本理论和基本技术，内容涉及编程语言、操作系统、数据库、计算机网络、软件工程、中间件和嵌入式技术。第三部分是关于 IT 的基本应用技术，内容涉及办公自动化、呼叫中心、电子商务、物联网、云计算、3G、无线网、4G 和 NGN。每个单元的内容都包括概览、重点、关键词、案例、阅读、技术术语和练习等几个部分，使得教师易教，学生易学、易用。

本书可作为高等院校 IT 相关专业学生的教学用书，也可作为 IT 相关工作人员的辅助用书。

前　　言

　　IT 专业英语是高等教育本科信息技术相关专业的一门重要的课程，具有其他课程所不能替代的地位。而教材作为整个教育过程的核心组件，它不仅反映着社会发展的要求，而且在某种程度上还直接决定着受教育者的培养质量。目前，随着中国参与国际合作和企业参与国际业务的逐步深化，无论在质量上还是在数量上，社会和企业对具有足够 IT 专业英语能力的工程应用型人才的需求都日益提高。为了满足社会和企业对人才的这种实际需求，必须重新反思信息技术专业英语课程的教学内容和教学目标，在这个过程中，我们编写了这本与当前人才培养目标相适应的，内容丰富、题材新颖，集信息技术专业知识和英语运用能力为一体的信息技术专业英语教材。

　　全书分为三大部分，共二十二个单元。第一部分共六个单元，是关于 IT 专业的几类常用的实用文档写作，内容涉及简历、面试、职务、电邮、技术报告和研究报告。第二部分共七个单元，是关于 IT 的基本理论和基本技术，内容涉及编程语言、操作系统、数据库、计算机网络、软件工程、中间件和嵌入式技术。第三部分共九个单元，是关于 IT 的基本应用技术，内容涉及办公自动化、呼叫中心、电子商务、物联网、云计算、3G、无线网、4G 和 NGN。本书有以下几个方面的特点：

　　(1) 内容结构清晰。每个单元都包括概览、重点、关键词、案例、阅读、技术术语和练习等几个部分，使得教师易教，学生易学、易用。

　　(2) 注重写作。本书通过大量的英语写作指导以及范例，使读者了解这些文档的写作规范，并掌握常用文档的写作方法，以弥补目前我国高校学生英语写作能力的不足。

　　(3) 注重阅读。每个单元除了主要的教程内容外，还额外给出阅读材料，大量的阅读可以有效提高学生阅读相关知识及掌握词汇的能力。

　　(4) 选题内容宽泛而且新颖。本书题材涵盖从专业文案写作到基本技术、基本应用等方面的与 IT 知识相关的内容，而且所有的题材都是近几年 IT 领域的热门话题，如物联网、3G、4G 等。

(5) 内容由浅入深、一脉相承。在基本技术和基本应用部分，每个单元的技术内容都按照从定义到介绍、再到实际案例的顺序编写，便于教师的教学和学生对本单元技术术语的整体掌握。

在本书编写过程中，我们的同事——大连理工大学在读博士杨睿老师提供了很多宝贵的意见和建议，在此表示衷心地感谢！

尽管编者们在选词造句、资料的规范化等方面都做了大量的工作，但由于学识和见闻的局限，必有许多不足之处，望同行及读者提出宝贵的意见，编者将不胜感激！

编　者

2012 年 11 月

Content

Chapter 1   Primary Stage

Chapter 2 Development and Improvement

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Chapter 1

Primary Stage

UNIT 1 Writing A Winning Resume

Overview

- *The definition of resume*
- *Introduction to resume writing*

Key Points

- *Understanding the fundamental concepts of resume writing*
- *Knowing the steps of resume writing*
- *Mastering how to create a resume*

Key words: *resume, sections of a resume, resume format*

1-1 Sample Engineering Resume
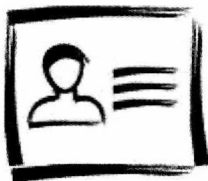
A resume is a summary of your experiences and skills relevant to the field of work you are entering. It highlights your accomplishments to show a potential employer that you are qualified for the work you want. It is not a biography of everything you have done. Its purpose is to get you an interview. A resume can (and often should) reflect more than just your paid work experience. Current students, in particular, should consider including the details of your more important extracurricular, volunteer and leadership experiences. Tailor separate resumes to fit each career field in which you are job searching. Some people create slightly different resumes tailored to each job opening.

➢ Sample 1

Michael Zhang
No. 253, North Huanghe Street, Huanggu District, Shenyang, Liaoning, China
Zip code: 110034
(086)024-86578401

OBJECTIVE:

Seeking an entry-level position in embedded systems, software development, web-design or other position where I can apply my knowledge of programming.

EDUCATION:
Shenyang Normal University
B.S., Computer Science, June 2013

Relevant Courses:
- Data Structures
- Programming Languages
- Object-Oriented Design
- Digital Logic
- Software Engineering
- Database Design
- Computer Network
- Operating Systems

TEAM WORK EXPERIENCE:
- Digital Logic Course Project: Designed and implemented circuits using Xilinx to make an elevator operate.
- Senior Group Project: Designed and implemented a project sponsored by Hope Frame Company to design picture frames and calculate the cost of materials using Java language.

COMPUTER SKILLS:
Operating systems: Win XP, UNIX, LINUX
Languages: C, C++, 8086 Assembly, Scheme, Lisp, Java, Visual Basic
Software: MS Word, MS Excel, MS PowerPoint, MS Access
Web: Experienced in HTML, DreamWeaver

WORK EXPERIENCE:
- Hope Frame Company, Sales Representative/Manager , 1/2012–Present

ENGLISH PROFICIENCY:
Fluent English in lisitening, speaking, reading and writing.

Richard Anderson
1234, West 67 Street,
Carlisle, MA 01741,
(123)-456 7890.

Objective:
A position as a Programmer Engineer.

Strengths:
Proficient or familiar with a vast array of programming languages, concepts and technologies, including, but not limited to: Perl, C, C++, English, HTML, CGI, Unix, OS/2, MS-DOS, Java, JavaScript, SQL, i80x86 and 65x02 assembly, COBOL, emacs, vi, REXX, device drivers, compiler and language design, user interfaces, databases, client/server, telecommunications, debugging, reporting, and optimization.

Experience:
Lead Programmer, 1996 – Present

Hertz Professional Travel Services, Pittsburgh, PA,

Responsible for all aspects of acquiring, installing and administering LAN hardware (Intel-based PCs, Ethernet and twisted pair); network operating systems (Novell Netware 2.15c and 3.12; OS/2 Warp; Windows 95); end-user software applications; and telephone networks (NorStar-PLUS Prelude and Cinphony Automatic Call Distributor). Responsible for designing, implementing, debugging and documenting the following FoxPro systems: networked reservations, trip scheduling, billing and reporting; real-time call entry and vehicle dispatching; interfaces to electronic billing, automated eligibility verification, remote accountability and quality assurance services.

Analyst, 1990 – 1996
Dining Consultants, Pittsburgh, PA

Worked with management to refine goals, designing and implementing cutting-edge user and device interface technologies for a networked, corporate-wide restaurant franchise management system.

Education:

Pennsylvania State University, State College, PA

B.S., Engineering , 1989

1-2   Words & Expressions

extracurricular adj. 学校课程以外的，课外

embedded system 嵌入式系统

programming languages 编程语言

object-oriented 面向对象

circuit 电路

assembly 汇编

software 软件

hardware 硬件

LAN 局域网

eligibility n. 适任，合格；被选举资格

accountability n. 有责任，有义务，可说明性；会计责任；可计量性；责任制

internship n. <美> 实习医师，实习医师期

chronological adj. 按时间的前后顺序排列的；编年的

prolong vt. 延长，拉长；拖延，延期

GPA = Grade Point Average 平均分数

transcript n. 抄本；誊本；打字本；副本

1-3   Reading Material

Writing A Winning Resume

STEP 1   Make a list of your various activities over the years.

Students should list paid work, volunteer positions, extracurricular activities, (especially those in which you had a leadership role) and internships. Students should go as far back as four or five years. Even graduating seniors will often have one or, occasionally, two items from high school on their resume. However, there may be also so many experiences from college that may not need to include experiences from high school. Alumni may also list volunteer, leadership and civic activities, especially those in which you had a leadership role or those that indicate skills relevant to the career field you are pursuing.

STEP 2   Write a paragraph about each important item on your list.

"Important items" would include most paid work, internships, extended volunteer activities, and activities in which you had a leadership role. Don't worry about the wording of your paragraphs at this point — for now, they don't need to fit the standard "resume language." Describe accomplishments as well as duties. An example of a duty might be "I maintained ten computers, loading new software and resolving problems as needed," while an example of an accomplishment might be "I created two self-paced powerpoint presentations to train people in our office on the new company software, and it was so successful that my manager asked me to present it to five other managers in the company."

NOTE: You will eventually change your wording into "resume language," dropping any "I's" and making your phrases more concise. For now, use whatever language you want.

STEP 3   Pick the items that you will highlight or emphasize on your resume.

Give this some thought! Consider two factors here:

1) What are your greatest strengths, and how can you demonstrate those strengths through your experience?

All employers value certain qualities: team player; good communication skills; leadership abilities. In addition, you have particular skills that you consider your strong points, you would generally try to bring those to light, as well. (If you want help understanding your skills, we recommend you speak with a career advisor.)

2) What are the requirements and needs of this particular industry, this particular employer, and this particular job?

Here's an example of the needs of an industry and a job:

Advertising industry account executive: the industry tends to value creativity, high energy, and the ability to work in a hectic, deadline-driven environment. the job of account executive demands that you be detail-oriented, good with people, and able to handle many projects at once.

Your task, then, would be to demonstrate those qualities through the activities described on your resume.

NOTE: You may want to create somewhat different resumes for different jobs.

STEP 4   Create the sections of your resume.

NOTE: What follows is the format for a chronological resume, by far the most common form of resume in use today. Occasionally, alumni who are changing careers or re-entering the work force

after a prolonged absence may find that a functional resume is more appropriate.

1. Name and Address

Put your name in at least 14-point. Recruiters often must look through stacks of resumes in search of a particular one. Make it easy for them to see your name.

If you are still in school, be sure to include both your school address and phone number, as well as the address and phone number where you can be reached during school vacations or after you graduate.

Include your e-mail address. If you check your e-mail during school vacations, you may want to center the address on your resume in a way that implies it is not just associated with your school address. Be sure to have a professional email address for your job/internship search. Employers may be turned off by your greatguy@gmail.com email address. Also avoid the email hyperlink under your email address. The line under your email should not be included.

Avoid unnecessary personal information such as marital status and date of birth.

2. Objective / Keywords / Summary

An objective is optional. If you have worked out a clearly targeted job objective, then definitely include it.

Avoid pronouns and flowery language.

Focus on what you have to offer rather than on what the job can offer you. This may sound backwards, but employers are not so much interested in what you hope to get out of a job with them, so much as they want to know whether you fit their needs.

EXAMPLE:

OBJECTIVE: Editorial assistant position in publishing industry, utilizing my academic background in literature and my three years of experience writing for campus and local newspapers.

If you are not clear on your career goals, you probably should not include an objective on your resume. You should work with a career advisor to focus you interests and objectives.

If you are applying for an internship, you probably should not include an objective on your resume.

IMPORTANT: Resumes that are sent to an employer by e-mail or that are entered onto a form on the Web may end up on a resume database. When recruiters seek resumes from these databases, they try to match certain keywords appropriate to a particular career field.

Particularly for job seekers with experience in that career field, it is important that your resume contain some of those keywords. Click here to learn more about resume keywords.

Experienced job seekers, especially those with two-page resumes, sometimes include a Summary

of Qualifications section at the beginning of their resume. IF you choose to include a Summary, it should be concrete (e.g. "five years management experience in the health care industry," etc.), and it should include as many appropriate keywords as possible.

3. Education

This section always goes first on your resume, as long as you are in school.

If you are still an undergraduate and applying for an internship, list your high school below Boston College in this section (freshmen and sophomore students).

NOTE: Your significant activities from high school can be listed in this section, though many students benefit more from listing those in more detail in their Experience or Activities sections.

If you have graduated from college, your education section goes first on your resume from one to three years after you graduate, depending on such factors as whether your education was relevant to your career field and how impressive your work experience has been in the intervening years. If you have recently received a graduate or professional degree, your education would usually go at the top of your resume.

As a graduating senior, your GPA should always be mentioned, as long as it is above 3.0. Most recruiters will assume that it is below 3.0 if they do not see it on your resume. (The phrase "3.2/4.0" indicates that you have a 3.2 GPA on a scale that runs up to 4.0. Some schools use a 5.0 scale.) Your GPA is printed on your most recent BC transcript. Do not round up your GPA. If you have a 3.90, put that down. Do not round up to a 4.00. Employers want to see accurate information and may compare your resume GPA with your official transcript.

"Courses studied" or "Relevant Coursework" is an optional section. If you have taken courses outside your major that are relevant to the job (or if you simply want to emphasize your academic training relevant to the job or internship), you would definitely benefit from including this section. For example, if you were a Philosophy major trying to find work in the computer industry, and you had taken three courses in the Computer Science department, you would definitely include them in a "Relevant Courses" section.

Significant honors and awards can be included as a sub-category of your Education section.

4. Experience

What should you include in this section?

Don't feel that you must limit this section to paid work experiences, especially if you are still in college or a recent graduate. Employers understand that the most valuable or most challenging experiences often occur in internships, volunteer work or other extracurricular activities.

Nursing Clinical Experience—list placements in reverse chronological order, including dates. Describe type of setting, responsibilities, and knowledge gained.