

The Workplace

Volume 1, Issue 6

October 6, 2000

A Fact Sheet

Highlights

- Four fastest growing occupations are in computer and data processing services.
- Most of the better paying jobs require advanced technical training or college degrees.
- Working conditions are generally good, allowing for flexibility.

Job Opportunities in Computer Services

The four fastest growing occupations, according to the U.S. Bureau of Labor Statistics, are in the area of computer and data processing services. These occupations are computer engineers, computer support specialists, systems analysts and database administrators.

The specific job functions are:

1. Computer Engineers design and develop new hardware and software. They are generally divided into:

- Hardware engineers who design, develop and test computer hardware and supervise production of the hardware, or
- Software engineers who develop software systems for automation and control in business and manufacturing or develop applications (programs) designed to do specific things. When they work in applications development,

they analyze needs and then create new software or modify existing software to perform a task or function. Most computer users use programs written by applications developers for word processing, data bases, etc.

Most computer users use programs written by applications developers for word processing, data bases, etc.

- Average hourly earnings for these positions is around \$27.25.
2. Computer Support Specialists are the people responsible for helping the users of computers and software by interpreting problems and offering solutions or other technical support. Average hourly earnings for these positions is around \$17.50.

Occupation	Employment		Change
	1998	2008	
Computer Engineers	299,000	622,000	108%
Computer Support Specialists	429,000	869,000	102%
Systems Analysts	617,000	1,194,000	94%
Database Administrators	87,000	155,000	77%

Table 1: Job growth in computer related occupations is projected to increase by as much as 108% by 2008,

AUTHOR INFORMATION:

Dr. Jacquelyn P. Robinson
Community Workforce
Development Specialist
State Headquarters
216 Extension Hall
Auburn University, AL
36849-5631
Telephone (334) 844-5353
FAX (334) 844-9022
jrobinso@aces.auburn.edu



3. Systems Analysts study business, engineering and scientific data processing problems and then design new ways to utilize information to solve these problems. Their methods can include such things as data modeling, information engineering and structured analysis. They help unite the hardware and software to work together. Average hourly earnings for these positions is around \$24.50.

4. Database Administrators set up computer databases and manage any changes to them. They look at what data are available or needed and how it can be stored and retrieved for use by software applications. They may also be responsible for computer security. Average hourly earnings for these positions is around \$24.50

While many businesses have "in house" computer experts, most businesses rely on the computer and data processing services industry to meet their needs, either on a contract basis or as a customer. Because of this, rapid employment growth of 117% is esti-

"Job growth in computer related occupations is projected to increase by as much as 108% by 2008."

mated at in the area of computer and data processing services between 1998 and 2008. There are currently around 106,000 businesses in the industry, with more springing up every day.

Working conditions are generally a plus for this type of employment. Most workers have clean, quiet offices. Where they work in facilities management or maintenance and repair, they normally work in computer operations centers or repair shops. There is a growing trend of working from remote locations or home through utilization of the Internet and modems.

While the computer and data processing services field can be entered at the educational level of high school graduate, most of the better paying jobs require advanced technical training or college degrees. Three of the four hottest positions, computer engineer, systems analyst, and database administrator generally require a college degree and many of the people in the field have advanced technical degrees or a masters degree in business administration with a concentration in information systems.

Dr. Jacquelyn P. Robinson

Community Workforce Development Specialist

Alabama Cooperative Extension System

Source: U.S. Department of Labor Statistics, October, 2000; www.bls.gov



Issued in furtherance of Cooperative Extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, and other related acts, in cooperation with the U.S. Department of Agriculture. The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) offers educational programs, materials, and equal opportunity employment to all people without regard to race, color, national origin, religion, sex, age, veteran status, or disability.