

## Information Systems Specialist ◀

**BRIEFLY:** Businesses depend on computers to store essential information. They also depend on information systems specialists, like Aleatha Owens, to keep the computers—and therefore the workplace—running smoothly and efficiently. Aleatha sets up and maintains computers for company employees and solves the pesky problems that inevitably arise.

### Aleatha Troubleshoots Troubled Computers

#### Patient With Both Machines And Their Users

At Beltone Electronics in Chicago, Ill., Aleatha Owens must keep 350 personal computers (PCs) running. As a degreed information systems specialist, she not only enjoys her work but also does it successfully. But, she admits, the users of these PCs can be more of a challenge than their equipment. By the time they contact her, they are often frustrated and irritable because their PCs aren't working and they want her to fix them fast. She works as quickly as possible, soothing her co-workers as she solves their hardware, software, and network problems.

**Aleatha (25) not only diagnoses problems and comes up with solutions. She also installs and maintains computers and their components and installs software. And she provides network support by creating new user accounts and installing printers on the server. Then she teaches employees how to use the system.**

Because she works with rapidly changing technology, she must constantly update her skills and continually take classes to learn more. In fact, she says, she can't keep up. She wishes she had more on-the-job opportunities to increase her knowledge and develop skills.

When Aleatha graduated from Dunbar Vocational High School in Chicago, she thought she was headed for a job working with sheet metal since that was the vocational sequence she had taken. The more she learned about computers, however, the more she was drawn to this field. So, instead of finding a job in sheet metal, she

enrolled as a computer science major at Southwest State University in Marshall, Minn.

Because she was having difficulty with the required math courses, she left after a year and transferred to Southern Illinois University in Carbondale. An academic counselor there suggested she try computer information systems, a program that focuses on programming and computer applications. This would allow her to bypass courses in higher math and programming languages required for a computer science degree. Aleatha found computer information systems to be a good fit and, in 2000, graduated with a bachelor's degree in it.



► After hooking up a replacement computer at an employee's station, Aleatha takes apart the computer that needs repairs.

## FOR THE RECORD



**Aleatha Owens**  
Information Systems Specialist  
Beltone Electronics  
Chicago, Ill.

### EDUCATION

- ▶ Dunbar Vocational High School, Chicago, Ill. Graduated 1993. Favorite subjects—science, chemistry, Spanish. Favorite activities—choir, pompons.
- ▶ Southwest State University, Marshall, Minn., 1993-1994. Studied computer science.
- ▶ Southern Illinois University, Carbondale. Bachelor's degree in computer information systems 2000.
- ▶ Continues to take computer courses to update her skills. Always wanting to learn more, she soon will start classes in Microsoft Visual Basic and networking. Although the company will reimburse her for the tuition, it was she who found the classes and approached her boss about taking them.
- ▶ *“There are many computer-related things I could do—programming, Web design, technician. There’s a variety of options for a person with information systems training, and the money is good.”*

### WORK HISTORY

- ▶ Data processor, outpatient clinic, Chicago, Ill., after school and summer 1989-1990. Entered data for outpatient pharmacy clinic.
- ▶ Usher, Andy Frain, Chicago, after school and during vacations 1990-1992.
- ▶ Ticket sales, Ticketmaster, Chicago, after school and during vacations 1992-1993.
- ▶ Food service worker, Southern Illinois University cafeteria, Chicago, while attending school 1994-2000.
- ▶ Ticket agent, Six Flags Great America, Gurnee, Ill., summer 1996.
- ▶ Sales associate, Hallmark Cards store, Chicago, summer 1997.

### JOB BENEFITS

- ▶ Favorites—medical and dental insurances. Others—optical insurance; paid training/education; merit reviews/recognition; bonuses; pension/retirement plan; leaves of absence; maternity leave; paid vacations, holidays, and sick leave; flexible time; lunch and parking facilities.

### CLOSE-UP

- ▶ *“I work independently. People are pleasant most of the time. I have a great boss. You don’t get that too often.”*

Right out of college, she snared an internship at Beltone Electronics. Her work ethic so impressed her employers that they offered her a full-time job. She credits all the jobs she held during high school and college with helping her to realize what companies expect of their employees and teaching her a variety of workplace skills.

In her first job, working after high school classes and in the summer, Aleatha entered information into a computer at an outpatient clinic near her home. Later, she was one of the famous Chicago Andy Frain Ushers. She particularly enjoyed this job because she got to see a variety of special events from baseball games to concerts. In her last year of high school, she sold tickets part time over the phone for Ticketmaster. In college, she worked as a ticket agent at Six Flags Great America, a sales associate in a Hallmark store, and a food server in the college cafeteria.

### Left in the Lurch

“All of these jobs taught me how to communicate with people,” she notes. And this skill is important in her current job when she has to deflect her co-workers’ frustration over their malfunctioning computers.

When Aleatha first came to work at Beltone, her supervisor worked right beside her, coaching and counseling her as she went along. Then, suddenly, he left. She was stunned. She was also scared. Left to do all the work herself, she doubted her ability to handle it.

**Her new boss suggested that she notify all the computer users about the situation. “So I sent everyone an e-mail telling them what was going on. Then I added, ‘I’m trying my best to get the work done for you.’” After receiving that e-mail, people stopped her in the halls to encourage her. They told her that she was doing a good job and that they understood. “From that time on, everything started to fall into place,” she says.**

After an hour’s drive through Chicago’s rush-hour traffic, Aleatha arrives at work by 8:30 a.m. She first checks with the help desk about any immediate problems and reads her e-mail. “The Dungeon,” as she calls her office, is a large, windowless workroom with brick walls. In addition to her work area, the room has storage for different computers and their components.

Yesterday, minutes after she arrived, an employee needed Aleatha's help logging onto the company's server. She reset his password. Then, she called to tell him what she had done and ask him to let her know if he had any more problems.

Her next task was to create a user account on the server for a new employee, a process that takes about 15 minutes. She must first get into the right place on the server and then use special commands to tell it that there is a new user and assign the user a password.

**No sooner had Aleatha finished setting the password than she was notified that a printer was having problems. She quickly figured that the difficulty was with the server to which the printer is connected. So she went into the server room and, with a few well-placed keystrokes, took the driver off one server and transferred it to another. This problem has been recurring periodically, she says, because one server has not been working properly. So, until it is fixed, she regularly has to take printer drivers off it and put them on another server.**

Her next job was to create a new network connection for a PC. The employee's work area had been rearranged, so the previous cable was too short. After measuring the distance between the PC and the wall connection, she went to her workroom and, with a special cutter, snipped the correct length of cable from a large spool. She tested the cable using an RJ45 tester to make sure it would work properly once it was installed. Then, she untwisted the wires at the end of the cable and attached them to a connector plug that fits into the back of the PC.

### Used to Interruptions

At that point, Aleatha was notified about a network problem that required immediate attention. She's used to interruptions. Rarely does she finish one project before another shows up. But she doesn't mind. "The best thing about this job," she says, "is that I get to do a lot of different things."

While she was working on the network problem, her boss called to ask her to ready a laptop computer for an employee who was going out of town. "If my boss calls and asks me to do something, he does it in a nice, respectful way," she remarks. "That helps me to do my work better because I know that I am respected."



► *The huge jumble of wires is incomprehensible to most people, but Aleatha knows exactly where each one goes.*

Before finishing the cable installation, Aleatha checked with the employee to ask what software he would need on his trip. Then, she took the cable to the user's office and connected one end to his PC and the other end to the network connection on the wall. That done, she installed the software on the laptop. When she brought it to the user, she took a moment to chat with him about his trip and to ask about his children.

Next, she took a PC to a new employee, set it up, notified the network about a new user, and assigned a password. Then, she installed e-mail services on another PC.

Aleatha likes working independently, but not having backup help can sometimes be difficult. "I have to lift these PCs by myself, and I have strained my back," she says.

**Yesterday, she left at 12:30 for lunch at an Italian restaurant nearby. Some days, depending on how busy she is, she doesn't get lunch until almost 3. Although there is a cafeteria in the building, she feels more refreshed when she gets outside during her lunch break.**

Returning at 1:15, Aleatha checked with the help desk and found that a server was having problems. She went to the server room, quickly assessed the problem, and rebooted the server. As she was checking to make sure everything was working, she got a call from a user who needed to be set up as an administrator on her

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PC so she could install some specialized software. Aleatha went to the employee's office to work on it.

At 2, she took a new PC to an employee's workstation and hooked it up to the network; then took his computer to her workroom to install a CD ROM driver and CD burner. She tested it to make sure everything was working properly before returning it to the user.

Installing a modem on another PC was her next task. She opened the back of it with a screwdriver and inserted components into correct places, connecting wires to the motherboard. She tested it; then closed it.

Aleatha left work at 5, going to a fitness center to work out for an hour before going home. Once a week, she rehearses with the Salem Baptist Church choir. "I like to sing," she says. "I also like to dance, read, and play with my two cats. Some days, however, I am too tired to do much outside of work."

She also has a talent for applying makeup. She has been makeup artist for two weddings and for several entertainers. "In 10 years," she says, "I'd like my own company in the makeup industry. I'd hire others to run it and still be working with computers myself."

## DATA FILE

## Information Systems Specialist

O\*NET:25104 D.O.T.:039.264-010 CF S.O.C.:3713 HC:SER

### WORK DESCRIPTION

Provides hardware, software, and network support to company employees—installs and maintains computers and their components; installs software; provides network support by creating new users and installing printers on the server; diagnoses problems; trains employees to use computers and software; stays abreast of new developments in computer hardware, software, and networks.

### WORKING CONDITIONS

In office. Some work may be sedentary with many hours spent working at a computer. Risk of eyestrain and carpal tunnel syndrome. Risk of back injury from lifting heavy equipment.

### PLACES OF EMPLOYMENT

Corporations; government agencies; colleges and universities; computer manufacturers; data processing firms; computer systems firms.

### PERSONAL CHARACTERISTICS

Problem-solving ability; mechanical ability; manual dexterity; eye/hand coordination; helpfulness; pleasantness; calmness; verbal ability; patience; organization; analytical ability; detail-mindedness; accuracy; independence; ability to work as part of a team; responsibility; flexibility; ability to multitask.

### EDUCATION AND TRAINING

Associate's or bachelor's degree in computer information systems, computer science, or related field. Continual training to update skills as technology advances.

### JOB OUTLOOK

Growing as demand for information systems increases.

### SALARY RANGE

\$30,000 to \$50,000 per year, depending on experience, education, employer, and location.

### RELATED OCCUPATIONS

Computer Help-Desk Technician  
Computer Repairer  
Corporate Software Trainer

### FOR MORE INFORMATION

**The subject of this biography is not available to answer personal inquiries. For more information, please write to the following organizations or go to their Web site. Addresses are current as of publication date.**

Association for Data Center, Network, and  
Enterprise Systems Management  
Web Site: <http://www.afcom.com>

Association of Information Technology Professionals  
Web Site: <http://www.aitp.org>

NaSPA: the Network and Systems Professionals  
Association  
Web Site: <http://www.naspa.com>

Association of Personal Computer User Groups  
Web Site: <http://www.apcug.org>

**To find information about similar careers, see separate Vocational Biographies booklet index and cluster listing, an encyclopedia, or books on careers found in your library, career center, or counseling or placement office. Check the vertical file, card catalog, microfiche, or computer listing. Look up the following words:**

Computers, Electronics, Information Systems, Software, Technical Support, Technician. Also see the Business and Office, and Manufacturing Careers in the Vocational Biographies Career Library Index.

### WHAT YOU CAN DO NOW

Contact a corporate information systems department and talk to technicians there about what they do. Get a part-time job working with computers. Work in your school's computer lab. Learn about different kinds of computers and software. Take courses in computers, physics, calculus, geometry, algebra, psychology, speech, English, and industrial arts.

### LIFESTYLE IMPLICATIONS

Information systems specialists usually work regular business hours, although some may be on call evenings and weekends to accommodate workers who need to use their computers at these times.

Persons are portrayed herein without regard to race, sex, or religious background. Careers discussed are to be considered acceptable for either sex. Information is current as of publication date.