INTERESTED IN A HIGH-TECH CAREER?
CHECK OUT 7 COMPUTER SCIENCE JOBS!

PRESENTED BY JOBS FOR THE FUTURE

Computer science is a high-wage field with many job openings across the country. JFF created seven computer science job profiles, including cybersecurity and networking positions, to support young people in better understanding this field and example occupations. The job profiles include key information such as common job tasks, necessary skills, median salary, alternative job titles, and preferred education levels. For more information about computer science, check out the industry overview resources we developed—one for high school students and one for high school educators.

The job profiles include seven positions in the computer science industry: computer user support specialist, software developer, website developer, information security analyst, vulnerability analyst, computer network support specialist, and computer and network systems administrator. A computer user support specialist is a great initial job in computer science because workers develop a broad knowledge base and better understand their specific skills and interests. While many computer science jobs prefer a bachelor's degree, it is possible to be hired as a computer user support specialist with on-the-job experience and/or an in-demand credential such

as a certificate or associate's degree related to computer science. Strong computer user support specialists can be promoted to higher-paying positions as they further develop their technical knowledge and skills. Another example of an opportunity for promotion in this field is advancing from computer network support specialist to a network systems administrator.

The data for these profiles, including national wage data, is from the U.S. Department of Labor's Occupation Information Network (O*Net) and the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook.

COMPUTER USER SUPPORT SPECIALIST

ALTERNATIVE JOB TITLES

- Computer specialist
- Computer support specialist
- Computer technician
- Desktop support technician
- Help desk analyst
- Technical support specialist

KEY EMPLOYABILITY SKILLS

- Customer service
- Active listening
- Critical thinking

KEY TECHNICAL SKILLS

- Set up and repair computer equipment
- Technical instruction/support
- Computer system maintenance

MEDIAN SALARY

Hourly
$28.82/hour

Salary
$47,460/year

WHAT THEY DO

- Provide technical assistance to computer users by resolving problems and answering user questions
- Support users with hardware and software needs, such as printing, installation, word processing, email, and operating systems

PREFERRED EDUCATION

- Bachelor's degree, but some businesses are open to an associates degree or on-the-job experience

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SOFTWARE DEVELOPER

WHAT THEY DO

- Create, maintain, and fix computer software
- Code and design software, applications, and programs
- Modify software to correct errors, adapt to new systems, or improve performance

ALTERNATIVE JOB TITLES

- Application developer
- Infrastructure engineer
- Software architect
- Software engineer

KEY EMPLOYABILITY SKILLS

- Critical thinking
- Problem solving
- Communication

KEY TECHNICAL SKILLS

- Software development and management
- Programming
- Coding

MEDIAN SALARY

Hourly
$52.95/hour

Salary
$110,140/year

PREFERRED EDUCATION

- Bachelor's degree

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WEBSITE DEVELOPER

ALTERNATIVE JOB TITLES

- Technology application engineer
- Web architect
- Web designer

KEY EMPLOYABILITY SKILLS

- Communication
- Critical thinking
- Attention to detail

KEY TECHNICAL SKILLS

- Digital media development and design
- Programming
- User experience and user interface design

MEDIAN SALARY

Hourly
$37.12/hour

Salary
$77,200/year

PREFERRED EDUCATION

- Bachelor's degree

WHAT THEY DO

- Design, build, and maintain websites
- Write and revise code to ensure the website is functional on different browsers, devices, and operating systems
- Communicate regularly with clients to ensure the website meets user needs

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INFORMATION SECURITY ANALYST

ALTERNATIVE JOB TITLES

- Information security officer
- Information security specialist
- Network security analyst

KEY EMPLOYABILITY SKILLS

- Problem solving
- Judgment and decision making
- Critical thinking

KEY TECHNICAL SKILLS

- Firewall protection
- Data encryption
- Risk management

MEDIAN SALARY

Hourly
$49.80/hour

Salary
$103,590/year

PREFERRED EDUCATION

- Bachelor's degree

WHAT THEY DO

- Protect digital files against accidental or unauthorized modification or destruction
- Monitor and update virus protection systems
- Assess computer-system security risks and implement risk mitigation strategies

VULNERABILITY ANALYST

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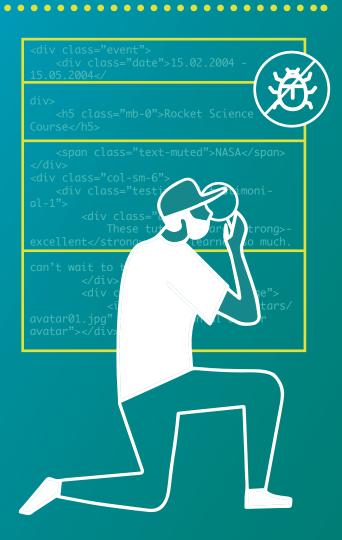
WHAT THEY DO

- Test security level of computer systems to determine protection plan
- Simulate cyberattacks to show clients where their systems may be vulnerable
- Design security solutions to ensure systems are protected

ALTERNATIVE JOB TITLES

- Penetration tester
- Application security analyst

KEY EMPLOYABILITY SKILLS

- Problem solving
- Communication
- Teamwork

KEY TECHNICAL SKILLS

- Information security
- Penetration testing
- Vulnerability assessment

MEDIAN SALARY

Hourly
$44.65/hour

Salary
$92,870/year

PREFERRED EDUCATION

- Bachelor's degree

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COMPUTER NETWORK SUPPORT SPECIALIST

ALTERNATIVE JOB TITLES

- Computer network specialist
- Information technology consultant
- Network specialist
- Network support specialist
- Network technical analyst

KEY EMPLOYABILITY SKILLS

- Critical thinking
- Judgment and decision making
- Active listening

KEY TECHNICAL SKILLS

- Software installation
- Network maintenance
- Electronic data backup

WHAT THEY DO

- Analyze, test, and troubleshoot network systems such as local area networks (LAN), wide area networks (WAN), cloud networks, and servers
- Perform maintenance to ensure the networks operate properly without interruption
- Create an electronic data backup process to avoid loss of information

MEDIAN SALARY

Hourly
$31.47/hour

Salary
$65,450/year

PREFERRED EDUCATION

- Bachelor's degree

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COMPUTER AND NETWORK SYSTEMS ADMINISTRATOR

ALTERNATIVE JOB TITLES

- Information analyst
- Information systems manager
- Information technology specialist
- Local area network administrator
- Network administrator

KEY EMPLOYABILITY SKILLS

- Critical thinking
- Judgment and decision making
- Problem solving

KEY TECHNICAL SKILLS

- Manage network hardware and software
- Scripting and automation tools
- Data protection and security

WHAT THEY DO

- Install, configure, and maintain computer networks and related technology including both hardware and software
- Implement security measures for the network
- Manage electronic data backups to avoid losing information

MEDIAN SALARY

Hourly
$40.70/hour

Salary
$84,810/year

PREFERRED EDUCATION

- Bachelor's degree

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