

CYBER DEFENSE INCIDENT RESPONDER



MEDIAN SALARY

\$90,000+

JOB GROWTH

5%

DEGREE

Not Required

SKILLS

- Time management
- Detail oriented
- Decision making
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Identify the spread, speed, and impact of cyber defense incidents
- Track incidents from first detection through final fixes
- Record all discoveries and communicate them to appropriate groups
- Collect evidence of cyber attacks
- Reduce ongoing impacts with good data recovery practices

EXPLORE



CYBER.ORG

THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

VULNERABILITY ASSESSMENT ANALYST



MEDIAN SALARY

\$90,000+

JOB GROWTH

28%

DEGREE

Not Required

SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Help business leaders understand how to protect their IT systems and manage cyber risk
- Train staff to help company meet guidelines
- Prepare reports of findings from risk and vulnerability assessments

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

COMMUNICATIONS SECURITY MANAGER



MEDIAN SALARY

\$70,000+

JOB GROWTH

2%

DEGREE

Not Required

SKILLS

- Leadership
- Strong ability to effectively adapt communication for different groups
- Organized
- Disciplined

COMMON JOB DUTIES

- Maintain all Communications Security (COMSEC) equipment and materials
- Inventory and document usage of encrypted devices
- Organize and lead security trainings for proper use of COMSEC materials
- Prepare and report security incidents

EXPLORE



DEFENSIVE CYBERSECURITY SPECIALIST



MEDIAN SALARY

\$70,000+

JOB GROWTH

5%

DEGREE

Not Required

SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Strong ability to effectively adapt communication for different groups
- Collaborative

COMMON JOB DUTIES

- Look for cyber defense patterns and report findings
- Identify impacts of cybersecurity failures
- Increase awareness of and response to events that may impact work
- Categorize cybersecurity events as harmless or high risk
- Check systems regularly for suspicious activity

EXPLORE



INFORMATION SECURITY ANALYST



MEDIAN SALARY

\$120,000+

JOB GROWTH

32%

DEGREE

Not Required

SKILLS

- Critical thinking
- Strong ability to effectively adapt communication for different groups
- Detail oriented
- Commitment to continuous learning

COMMON JOB DUTIES

- Monitor network security for an organization
- Investigate security breaches and prepare reports on findings
- Use and oversee security software to protect sensitive information
- Study latest IT security trends to develop and update organization standards and best practices

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

CYBERSECURITY INSTRUCTOR



MEDIAN SALARY

\$80,000+

JOB GROWTH

3%

DEGREE

Required

SKILLS

- Leadership
- Strong ability to effectively adapt communication for different groups
- Organized
- Time management
- Commitment to continuous learning

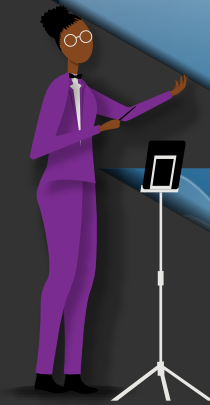
COMMON JOB DUTIES

- Teach and mentor students in cybersecurity
- Learn the latest cybersecurity trends and developments
- Write, deliver, and adapt lesson plans
- Follow and apply educational trends and standards

EXPLORE



CYBER EXECUTIVE



MEDIAN SALARY

\$240,000+

JOB GROWTH

-2%

DEGREE

Required

SKILLS

- Leadership
- Strong ability to effectively adapt communication for different groups
- Detail oriented
- Organized
- Collaborative

COMMON JOB DUTIES

- Determine organization-wide information security policies and procedures
- Implement and uphold information security standards
- Evaluate systems for functionality, risks, and security incidents
- Lead investigations into information security risks and incidents
- Oversee department staff

EXPLORE



INFORMATION SYSTEMS SECURITY MANAGER



MEDIAN SALARY

\$100,000+

JOB GROWTH

8%

DEGREE

Required

SKILLS

- Leadership
- Critical thinking
- Problem-solving
- Detail oriented
- Commitment to continuous learning
- Collaborative

COMMON JOB DUTIES

- Provide leadership, direction, and supervision to technical staff
- Create resources for non-technical staff to easily follow information security policies
- Research, plan, organize, develop, and evaluate systems to keep an organization's information secure
- Manage tasks to correct information security concerns
- Use knowledge of current cyber trends to support an organization's goals

EXPLORE



CYBER LEGAL ADVISOR



MEDIAN SALARY

\$130,000+

JOB GROWTH

5%

DEGREE

Required

SKILLS

- Analytical
- Problem-solving
- Ability to work independently and collaboratively
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

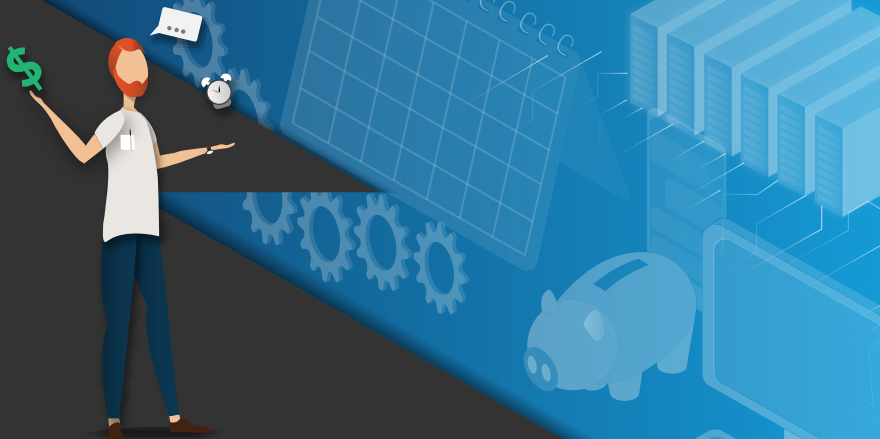
- Counsel leadership on laws and policies related to an organization
- Research and evaluate legal incidents
- Train staff on laws and policies
- Work closely with other groups to promote an organization's goals

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

PROGRAM MANAGER



MEDIAN SALARY

\$160,000+

JOB GROWTH

15%

DEGREE

Required

SKILLS

- Leadership
- Organized
- Detail oriented
- Collaborative
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Create and support a culture of security throughout an organization
- Engage in ongoing professional learning to stay current on new technologies and security threats
- Organize security trainings for staff
- Lead investigations into security violations

EXPLORE



ENTERPRISE ARCHITECT



MEDIAN SALARY

\$120,000+

JOB GROWTH

4%

DEGREE

Not Required

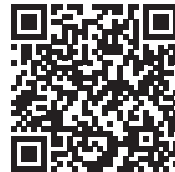
SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Create plans for how networks communicate
- Present network communication plans to leadership, customers, and team
- Perform testing
- Find new ways to improve technologies

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

SECURITY ARCHITECT



MEDIAN SALARY

\$100,000+

JOB GROWTH

9%

DEGREE

Not Required

SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Commitment to continuous learning
- Collaborative

COMMON JOB DUTIES

- Keep information safe by creating rules and making sure they are followed
- Ensure networks and systems are properly monitored
- Develop and maintain ways to keep an organization safe
- Monitor systems for weak spots
- Research and find additional tools to protect sensitive information

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

SOFTWARE DEVELOPER



```
public class Selection
{
    public static void sort
    (Comparable[] a)
    {
        int n = a.length;
```

```
for (int i = 0; i < n; i++)
{
    int min = i;
    for (int j = i+1; j < n; j++)
        if (less(a[j], a[min])) min = j;
    exchange(a, i, min);
}
```

MEDIAN SALARY

\$130,000+

JOB GROWTH

25%

DEGREE

Not Required

SKILLS

- Creative
- Problem-solving
- Detail oriented
- Focused and attentive
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Study users and adapt software to meet their needs
- Plan how systems and applications work together
- Test how systems function
- Keep records for maintenance and upgrades

EXPLORE



CYBER OPERATOR



MEDIAN SALARY

\$60,000+

JOB GROWTH

5%

DEGREE

Not Required

SKILLS

- Detail oriented
- Focused and attentive
- Learns quickly
- Problem-solving
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Plan cyber-support tasks for an organization and its customers
- Maintain training and supplies needed for systems
- Customer service
- Ensure readiness of communication equipment
- Defend network devices and detect possible risks

EXPLORE



CYBER OPS PLANNER



MEDIAN SALARY

\$100,000+

JOB GROWTH

4%

DEGREE

Not Required

SKILLS

- Critical thinking
- Time management
- Organized
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Keep leadership aware of possible dangers
- Provide leadership with continuous updates about cyber activities
- Ensure an organization is informed and up to date on important matters and goals

EXPLORE



CYBER ALL-SOURCE ANALYST



MEDIAN SALARY

\$120,000+

JOB GROWTH

4%

DEGREE

Required

SKILLS

- Problem-solving
- Time management
- Analytical
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Protect information systems and critical infrastructures
- Apply scientific and technical skills to troubleshoot problems
- Create written assessments to brief policymakers and defense teams

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

MULTI-DISCIPLINED LANGUAGE ANALYST



MEDIAN SALARY

\$70,000+

JOB GROWTH

2%

DEGREE

Not Required

SKILLS

- Multilingual
- Cultural awareness
- Critical thinking
- Pattern recognition
- Strong ability to effectively adapt communication for different groups

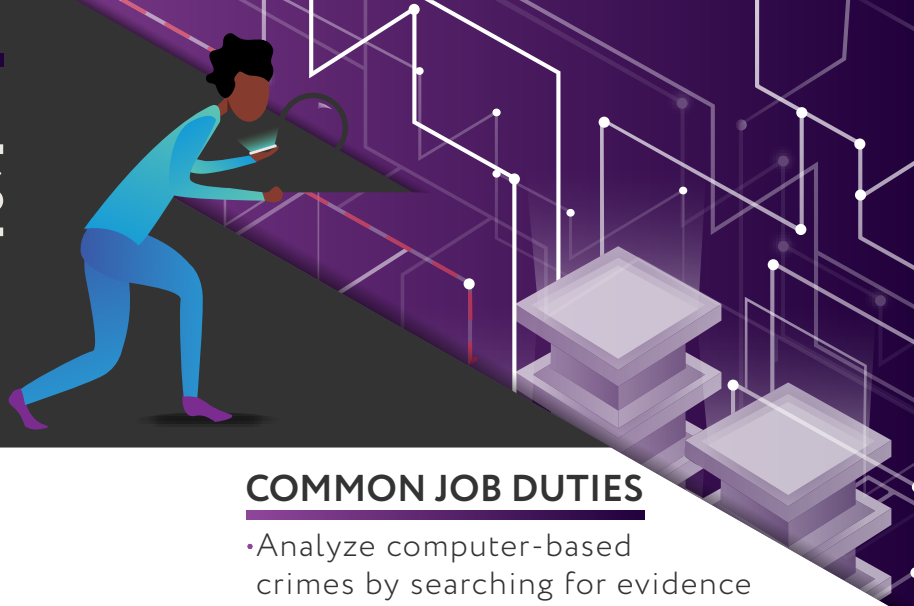
COMMON JOB DUTIES

- Apply language, cultural, and technical expertise to analyze and communicate intelligence information and help plan cyber functions
- Create and maintain language specific databases and resources
- Identify foreign languages and dialects in source data
- Translate written and spoken material into English

EXPLORE



DIGITAL FORENSICS ANALYST



MEDIAN SALARY

\$100,000+

JOB GROWTH

12%

DEGREE

Required

SKILLS

- Analytical
- Critical thinking
- Detail oriented
- Organized
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Analyze computer-based crimes by searching for evidence and recovering deleted data
- Understand and follow the timeline of evidence
- Discover potential sources of cyberattacks
- Protect potentially sensitive content

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

CYBER CRIME INVESTIGATOR



MEDIAN SALARY

\$80,000+

JOB GROWTH

6%

DEGREE

Not Required

SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Investigate suspicious activity and alleged cyber crimes
- Document cyber crime scenes and conduct witness interviews
- Collect evidence to identify suspects
- Prosecute cybercrimes and fraud
- Analyze cybersecurity threats for counter intelligence or criminal activity

EXPLORE



TECHNICAL SUPPORT SPECIALIST



MEDIAN SALARY

\$60,000+

JOB GROWTH

5%

DEGREE

Not Required

SKILLS

- Problem-solving
- Detail oriented
- Focused and attentive
- Learns quickly
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Evaluate technical problems and determine cause
- Record customer-reported descriptions of technical issues
- Guide customers through problem-solving steps and offer suggestions based on experience
- Install or repair computer hardware and software
- Report major problems or customer concerns to management and team members

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

SYSTEMS ADMINISTRATOR



MEDIAN SALARY

\$90,000+

JOB GROWTH

2%

DEGREE

Not Required

SKILLS

- Problem-solving
- Detail oriented
- Focused and attentive
- Collaborative
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Understand an organization's network and system needs
- Install appropriate hardware and software
- Make upgrades and repairs to maintain systems operations
- Oversee and maintain networks and systems security
- Train users on systems operations and organizational policies

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

KNOWLEDGE MANAGER



MEDIAN SALARY

\$90,000+

JOB GROWTH

7%

DEGREE

Not Required

SKILLS

- Leadership
- Critical thinking
- Detail oriented
- Creative
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Develop, implement, and maintain an organization's information-sharing platform
- Create, promote, and provide training on organizational knowledge management tools
- Develop best practices and performance measures
- Ensure an organization's knowledge management policy is followed

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

SECURE SOFTWARE ASSESSOR



MEDIAN SALARY

\$100,000+

JOB GROWTH

33%

DEGREE

Not Required

SKILLS

- Problem-solving
- Organized
- Detail oriented
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Ensure customers know how to maintain their software
- Determine potential risks and impact of software disruptions
- Study and review coding for errors
- Identify ways in which cyber adversaries could attack software
- Conduct software testing



ARTIFICIAL INTELLIGENCE RESEARCH SCIENTIST



MEDIAN SALARY

\$140,000+

JOB GROWTH

23%

DEGREE

Required

SKILLS

- Collaborative
- Critical thinking
- Problem-solving
- Creative
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Conduct research to advance AI capabilities
- Design and develop algorithms and models for solving complex problems
- Conduct experiments to evaluate AI performance and effectiveness
- Document research findings

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

QUANTUM COMPUTING RESEARCHER



MEDIAN SALARY

\$110,000+

JOB GROWTH

12%

DEGREE

Required

SKILLS

- Organized
- Detail oriented
- Commitment to continuous learning
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Analyze data and identify challenges in computer hardware and processes
- Develop theories for potential solutions to address challenges
- Conduct experiments to test theories
- Document research findings

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

INSIDER THREAT ANALYST



MEDIAN SALARY

\$80,000+

JOB GROWTH

3%

DEGREE

Not Required

SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Collaborative
- Commitment to continuous learning

COMMON JOB DUTIES

- Evaluate behaviors of people involved with cybersecurity investigations
- Collect, store, and study digital evidence
- Recommend threat reduction strategies
- Create and oversee an organization's digital risk management program

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

DATABASE ADMINISTRATOR



MEDIAN SALARY

\$110,000+

JOB GROWTH

8%

DEGREE

Not required

SKILLS

- Critical thinking
- Problem-solving
- Focused and attentive
- Organized
- Commitment to continuous learning

COMMON JOB DUTIES

- Identify user needs to create and manage database solutions
- Establish processes to keep data secure and prevent data loss
- Make and test changes to database structure to guarantee efficient and accurate operation

EXPLORE



NETWORK OPERATIONS SPECIALIST



MEDIAN SALARY

\$70,000+

JOB GROWTH

8%

DEGREE

Not required

SKILLS

- Critical thinking
- Problem-solving
- Detail oriented
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Oversee network data back-ups
- Create network security settings and access controls for individuals and groups
- Evaluate and report security incidents
- Diagnose network problems with appropriate software and tools
- Keep detailed records of network support activities

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

SYSTEMS SECURITY ANALYST



MEDIAN SALARY

\$100,000+

JOB GROWTH

10%

DEGREE

Not Required

SKILLS

- Organized
- Detail oriented
- Commitment to continuous learning
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Consult with managers to determine role of IT systems
- Research different technologies to find solutions that increase security and efficiency
- Oversee upgrades to existing systems
- Test systems to make sure they work as expected
- Write instructions and train users on all systems

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

PRIVACY OFFICER



MEDIAN SALARY

\$130,000+

JOB GROWTH

6%

DEGREE

Required

SKILLS

- Leadership
- Detail oriented
- Problem-solving
- Analytical
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

- Perform privacy policy checks
- Create and update an organization's policies, rules, and handbooks
- Ensure privacy rules are followed
- Lead incident response to privacy concerns

EXPLORE



CYBER.ORG

THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

DATA ANALYST



MEDIAN SALARY

\$100,000+

JOB GROWTH

35%

DEGREE

Required

SKILLS

- Critical thinking
- Detail oriented
- Commitment to continuous learning
- Strong ability to effectively adapt communication for different groups

COMMON JOB DUTIES

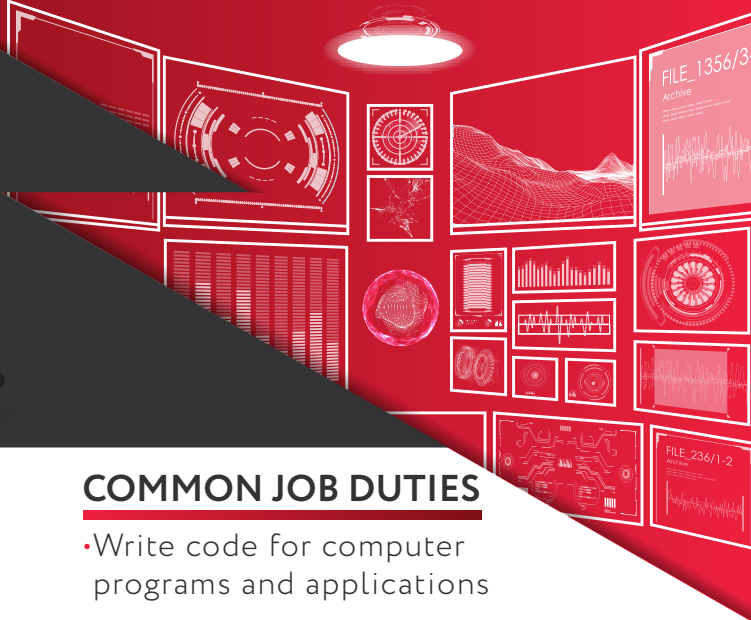
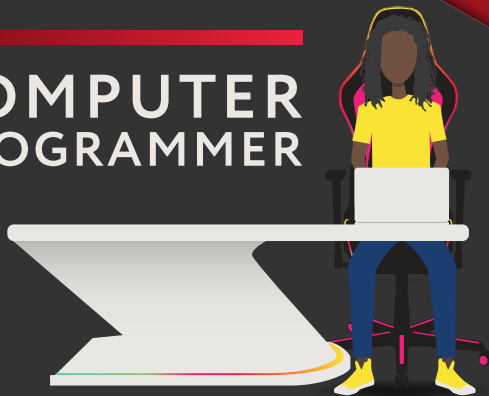
- Gather data from various sources and ensure accuracy
- Read, interpret, and process large data sets
- Use statistical software and apply algorithms to identify insights and possible outcomes
- Create charts and graphs to communicate data insights and make recommendations to leadership

EXPLORE



CYBER.ORG
THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER

COMPUTER PROGRAMMER



MEDIAN SALARY

\$90,000+

JOB GROWTH

-11%

DEGREE

Not required

SKILLS

- Critical thinking
- Problem-solving
- Analytical
- Detail oriented
- Pattern recognition

COMMON JOB DUTIES

- Write code for computer programs and applications
- Update, maintain, and troubleshoot systems to ensure they function properly
- Help design and develop user friendly software solutions
- Review existing or new software to identify potential vulnerabilities

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THE ACADEMIC INITIATIVE OF THE CYBER INNOVATION CENTER