

2024 Q3

Montana Cybersecurity Job REPORT

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***Job
Seekers***

OVERVIEW

The **2024 Montana Cybersecurity Job Report: Job Seeker Edition** provides current and historical Montana cybersecurity employment data for those interested in joining this workforce. In addition to detailed data on the number and location of job postings in Montana, this report includes breakdowns of in-demand skills, and in-state vs. out-of-state opportunities.

This edition also offers up-to-date cybersecurity job search advice and data on common benefit packages to help job seekers.

Information is collected from labor market analytics firm [Lightcast](#), the [U.S. Bureau of Labor Statistics](#) and [Cyberseek.org](#), a joint effort sponsored by Lightcast, [CompTIA](#), and the [National Initiative for Cybersecurity Education \(NICE\)](#). This report focuses on 16 BLS Standard Occupation Classifications:

- Computer and Information Systems Managers (SOC code 11-3021)
- Computer Systems Analysts (SOC code 15-1211)
- Information Security Analysts (SOC code 15-1212)
- Computer and Information Research Scientists (SOC code 15-1221)
- Computer Network Support Specialists (SOC code 15-1231)
- Computer User Support Specialists (SOC code 15-1232)
- Computer Network Architects (SOC code 15-1241)
- Database Administrators (SOC code 15-1242)
- Database Architects (SOC code 15-1243)
- Network and Computer Systems Administrators (SOC code 15-1244)
- Computer Programmers (SOC code 15-1251)
- Software Developers (SOC code 15-1252)
- Software Quality Assurance Analysts and Testers (SOC code 15-1253)
- Web Developers (SOC code 15-1254)
- Web and Digital Interface Designers (SOC code 15-1255)
- Data Scientists (SOC code 15-2051)

The quarterly **Montana Cybersecurity Job Report** is a joint effort of the [University of Montana's Center for Cybersecurity Workforce & Rural Policy](#) and CyberMontana, a legislatively funded initiative focused on furthering cybersecurity education, enhancing cybersecurity literacy statewide, and expanding the cybersecurity pipeline by connecting IT professionals and students with jobs across Montana.



SUMMARY

In this **2024 Q3 Montana Cybersecurity Jobs Report: Job Seekers**, we provide a strategic view of Montana's cybersecurity workforce. **Montana's local** cybersecurity job market remains relatively small, while the broader hiring environment is increasingly **shaped by national competition**. This report highlights where opportunities are concentrated and how job seekers can align their skills with current employer expectations.

The Montana market is a gateway to national opportunities. **Roughly 70% of cybersecurity-related job postings associated with Montana are from organizations located outside the state**. For job seekers, this means you are competing in a **national talent pool**. Success requires recognizing that while you may live in Montana, your opportunities are shaped by a national marketplace that rewards strong technical skills. **Software development and engineering** roles continue to represent the largest share of technical hiring demand.

This competition is reflected in the tightening local workforce: **only 71% of available cybersecurity jobs in Montana can be filled by the current talent pool, compared to an 80% national fill rate** ([Cyberseek.org](https://cyberseek.org), 2024). Employers **continue to prioritize candidates with demonstrated technical skills and experience**, which can make entry into the cybersecurity workforce more challenging for new job seekers.

To help job seekers build foundational job-ready skills, **CyberMontana offers targeted education pathways**, including the **Cyber Rapid Training Program and partnerships with Cybrary and Montana Code School**. These programs are designed to help participants earn **industry-recognized credentials**, such as CompTIA Security+, and strengthen their technical foundation for entry into high-growth roles.

Drop us a note at info@cybermontana.org to share your thoughts and suggestions regarding this report. We're always glad to hear from our readers!

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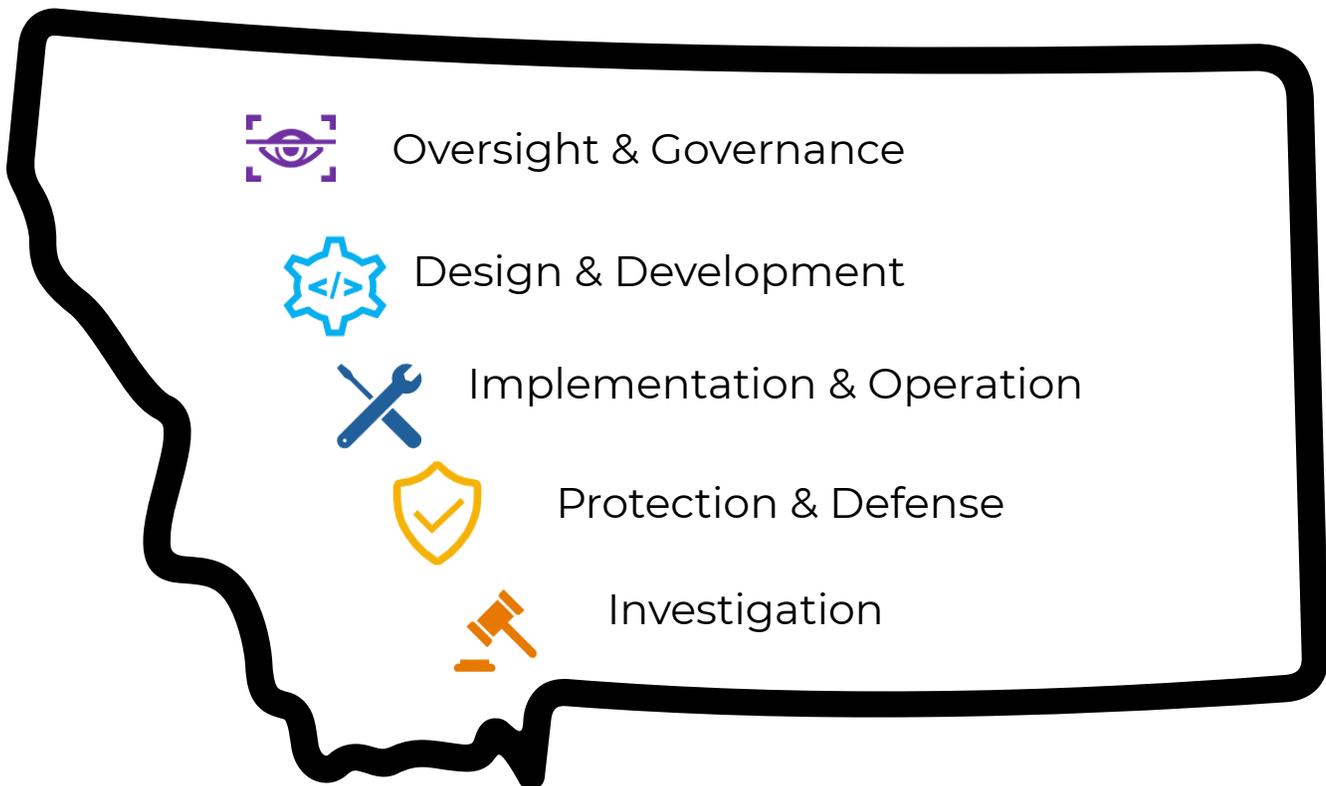
Dianne Burke - CyberMontana Director and Co-Director of the UM Center for Cybersecurity Workforce & Rural Policy

NICE FRAMEWORK

CyberSeek provides industry-leading information on state and national cyber-related employment. It's important to note that CyberSeek data is annualized, meaning job openings reflect a rolling 12-month period rather than a single quarter. This helps show longer-term demand, but it's not a snapshot of hiring in real time.

CyberSeek organizes job postings using the [NICE Framework](#), a nationally recognized structure that groups cybersecurity work into five categories and 41 defined work roles. This framework gives job seekers a shared language for understanding roles, skills, and career paths across the industry.

Thinking of a career in IT? The **NICE Framework (National Initiative for Cybersecurity Education)**, created by the National Institute of Standards and Technology (NIST) gives the cybersecurity world a shared language for roles, skills, and career pathways by organizing the field into 41 defined roles. **This information helps job seekers understand cybersecurity roles and skills so they can choose opportunities and training that fit their career goals.**



[Click Here to Connect to the CyberSeek Website.](#)

The Nice Framework was revised in 2025 and we have incorporated those revisions in all 2024 reports.

OVERVIEW

One-Year Look Back

Average Statewide
Quarterly Job Postings:

1,226

Oct 2023 - Sept 2024

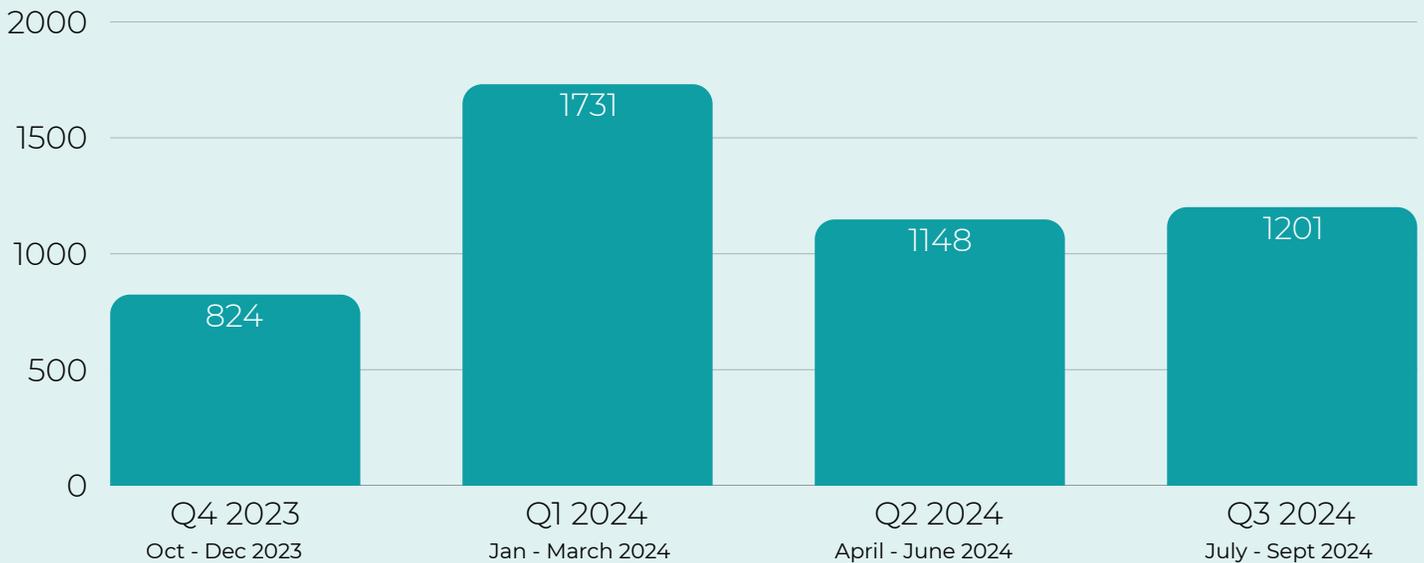
The chart below shows the total number of cybersecurity job postings in each quarter.

From October 2023 to September 2024, Montana **cumulatively averaged 1,226 postings across all quarters** for technology roles with cybersecurity components.

Early 2024 showed the highest volume of postings. During quarter 3 there was **rise of 53 average quarterly job postings.**

Average Quarterly Job Postings in Montana

● Quarterly Postings



Lightcast (2024)

One-Year Look Back

Average Statewide Quarterly
Hiring Estimates:

1,299

Oct 2023 - Sept 2024

Lightcast hiring estimates are modeled using annual data from job postings, BLS separation rates, and Census hiring patterns. That annual estimate is then evenly distributed across months, which is why monthly and quarterly hiring figures appear identical.

Several of the top posting sources are staffing companies, which can be a real advantage for job seekers. They often receive openings that never make it to public job boards and can advocate directly to employers, giving you more visibility and more pathways into roles across the state.

Note: Hiring data is **estimated**, not quantified.

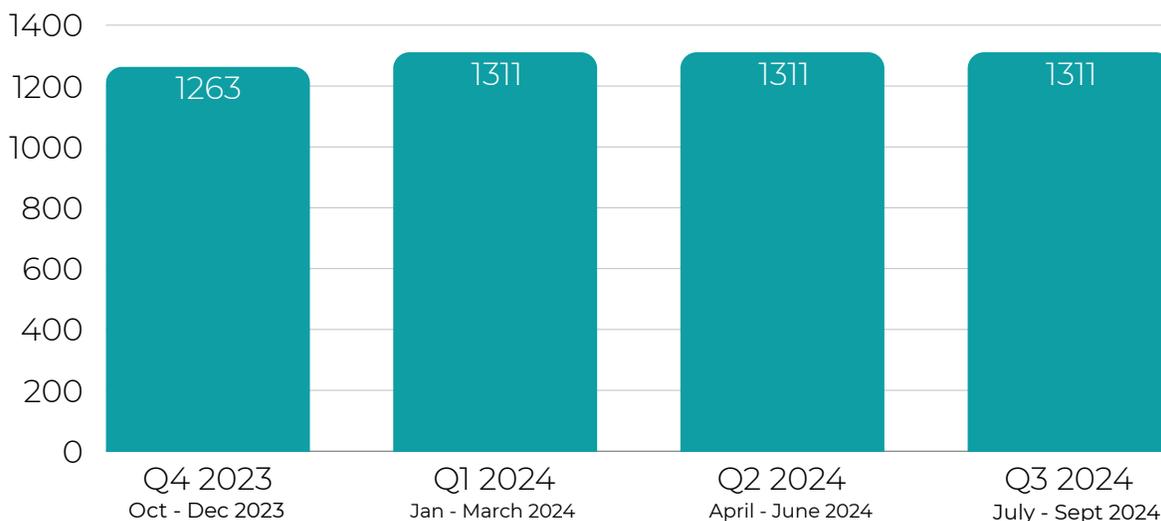
Top Posting Sources

Lightcast (2024)

- 1. dejobs.org (640 Postings)
- 2. disabledperson.com (148 Postings)
- 3. indeed.com (76 Postings)
- 4. simplyhired.com (70 Postings)
- 5. careeronestop.org (64 Postings)

Modeled Quarterly Hiring Estimates

● Quarterly Postings

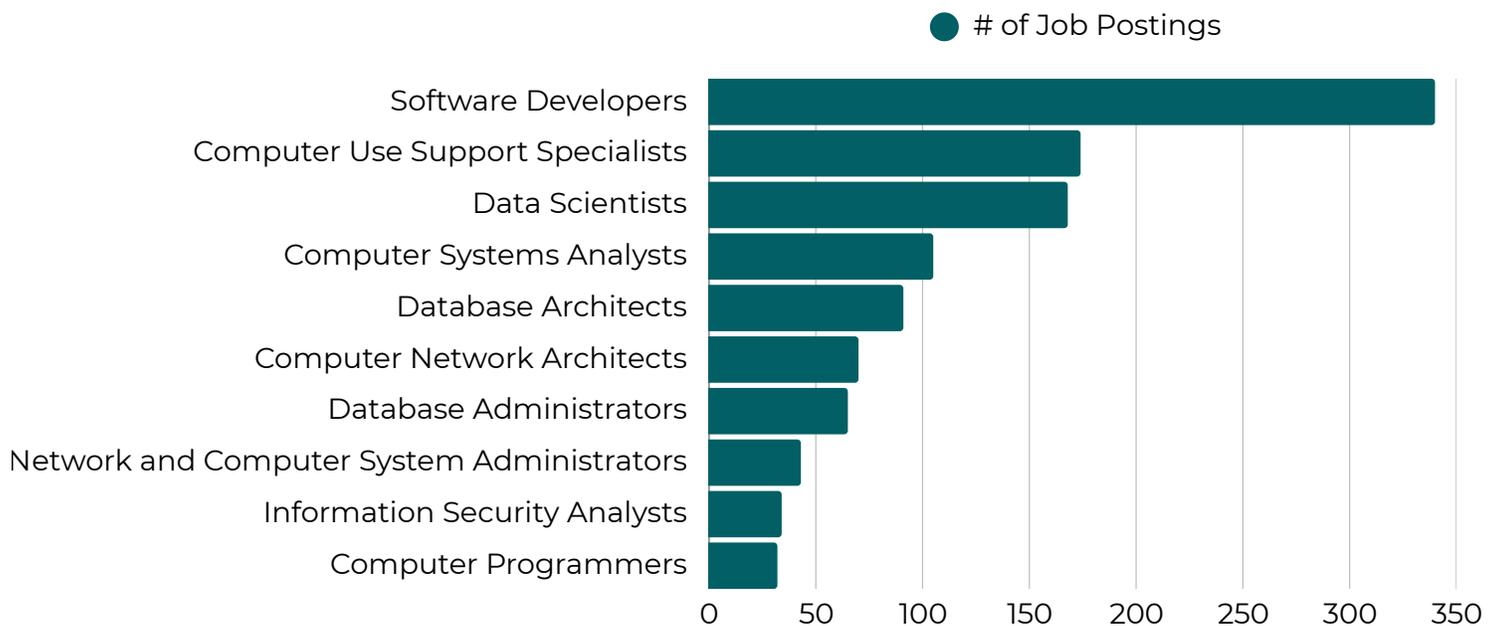


Lightcast (2024)

Montana Overview

For Job Seekers, the chart below highlights the top 10 posted occupations in Montana. Software developer has been the top occupation for all three quarters of 2024. Job seekers can use this information to target their search toward high-demand fields. In **Montana 71% of available cybersecurity jobs can be filled with the current number of cybersecurity professionals** (Cyberseek, 2024).

Top 10 Posted Occupations in Montana



Lightcast (2024)

National Overview

Job opportunities in the world of cybersecurity are **expected to grow 33% over the next decade** (US Bureau of Labor Statistics, 2024). There are, and will continue to be, many opportunities for workers to start and advance their careers within cybersecurity.

83% of available cybersecurity jobs can be filled nationally with the current number of cybersecurity professionals.

Lightcast (2024)

Cybersecurity Jobs

Take **21%** longer to fill than other tech jobs

CyberSeek (n.d.)

WHERE ARE EMPLOYERS LOCATED?

Job Location In-State vs. Out-of-State (Q3)

With the rise of online recruiting and remote work opportunities, it can be challenging for job seekers to determine where a company is actually located. Many national companies that advertise positions “in Montana” do not have a physical presence.

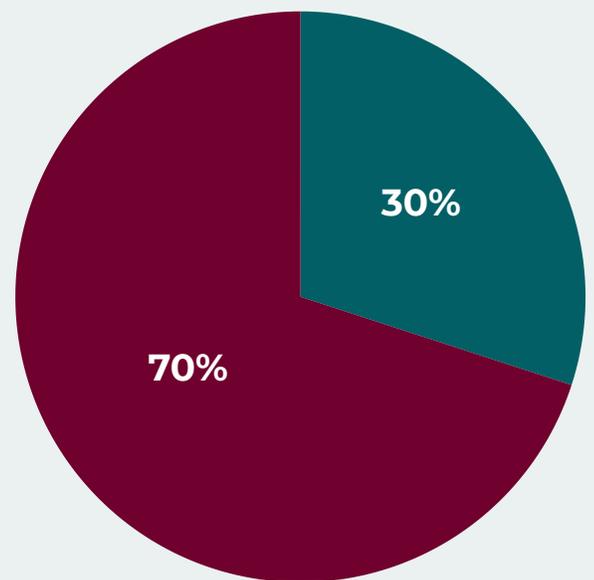
The figure to the right shows the average percentage of jobs posted by **companies with a presence in Montana** compared to the average postings by **companies with offices out-of-state**.

The number of jobs physically located in Montana increased by 12% from Q2 to Q3.

For job seekers, recognizing these patterns is important when evaluating postings, comparing opportunities, and confirming the location. Critically reviewing job postings keeps any job seeker informed when making career decisions.

Physical Location

● In Montana ● Out-of-State



Student Tip!

Remote work offers flexibility and access to higher-paying roles beyond your local area, but it also introduces security risks. Use dedicated devices, secure your home network, and stay current on updates, virus scans, and backups before making the transition.

During your early career, it is important to learn what modality is best suited for your focus levels, social needs, and motivation type. While some people are suited for remote work, the isolation from a collaborative in-person environment and need for constant self-motivation isn't for everyone. This, of course, can change over time and with experience.

Working remotely can be a great opportunity granting flexibility, a unique work environment, and chances to pursue jobs with salaries higher than those available in your geographic area.

However, individuals should not always expect a remote or hybrid position right out of the gate. Trust and experience plays a big part in gaining this luxury.



Pew Research Center (2023)

Student Tip!

Remote work is often a perk that comes with experience and tenure. It takes time to build trust, skills, and experience with 1-on-1 mentorship.

Additionally, maintaining motivation, time management, and focus at home is a skill all its own!

Based on the Stats...

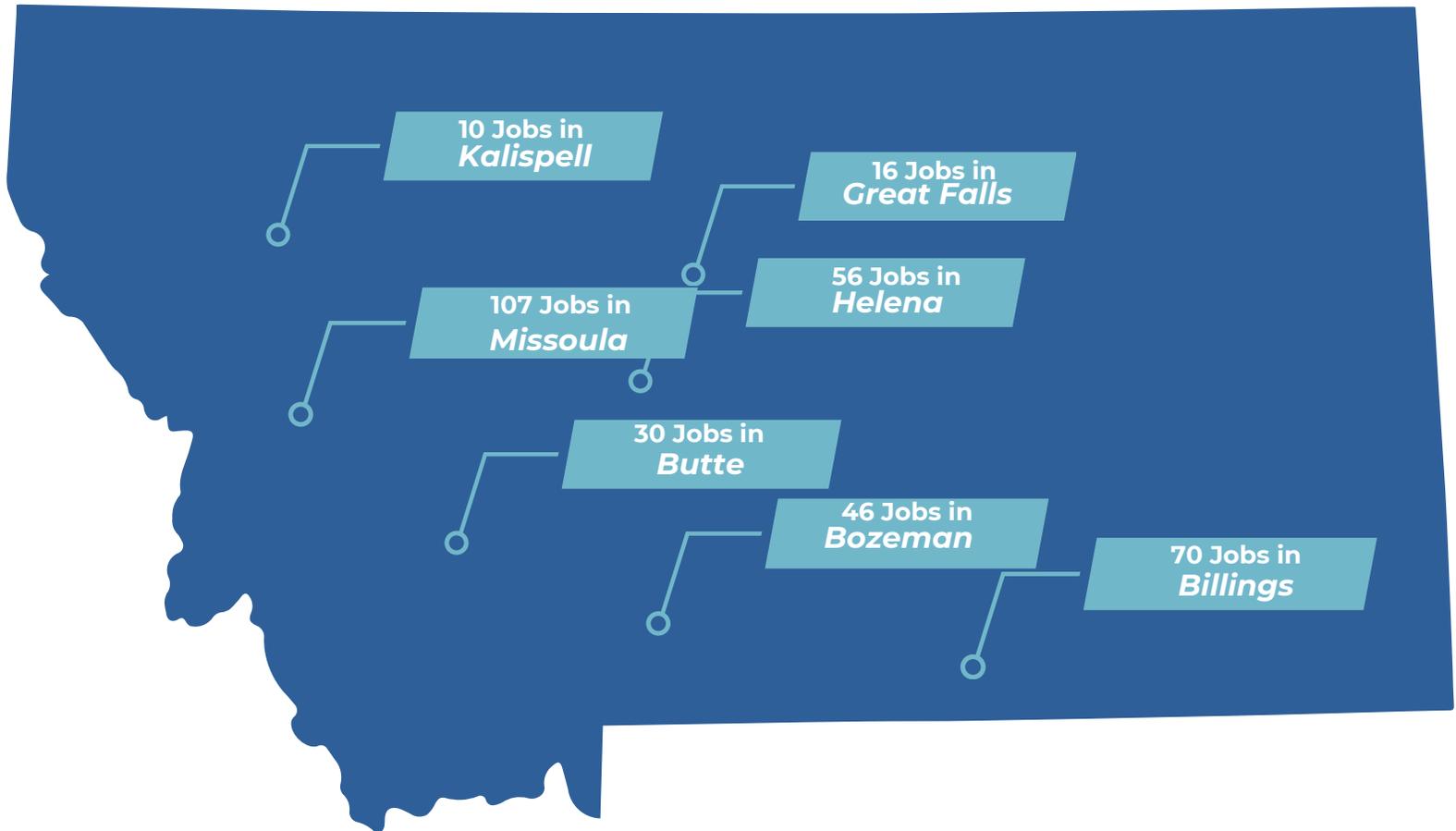
Blanket statements relating the number of remote opportunities are often misleading.

The statistic above leads us to believe these employees work 100% from home but instead includes hybrid employees and other mixed work models.

Considerations...

Remote work is often an earned privilege. Employers typically reserve those roles for people who've shown they can manage their time, communicate clearly, and stay reliable without in-person oversight. If you're aiming for remote or hybrid work down the road, build those habits early so you can demonstrate the independence and professionalism that these roles require.

Of the unique jobs postings advertised this quarter, 366 jobs were physically in Montana. 93% of these jobs located in Montana were advertised in these 7 Montana cities:

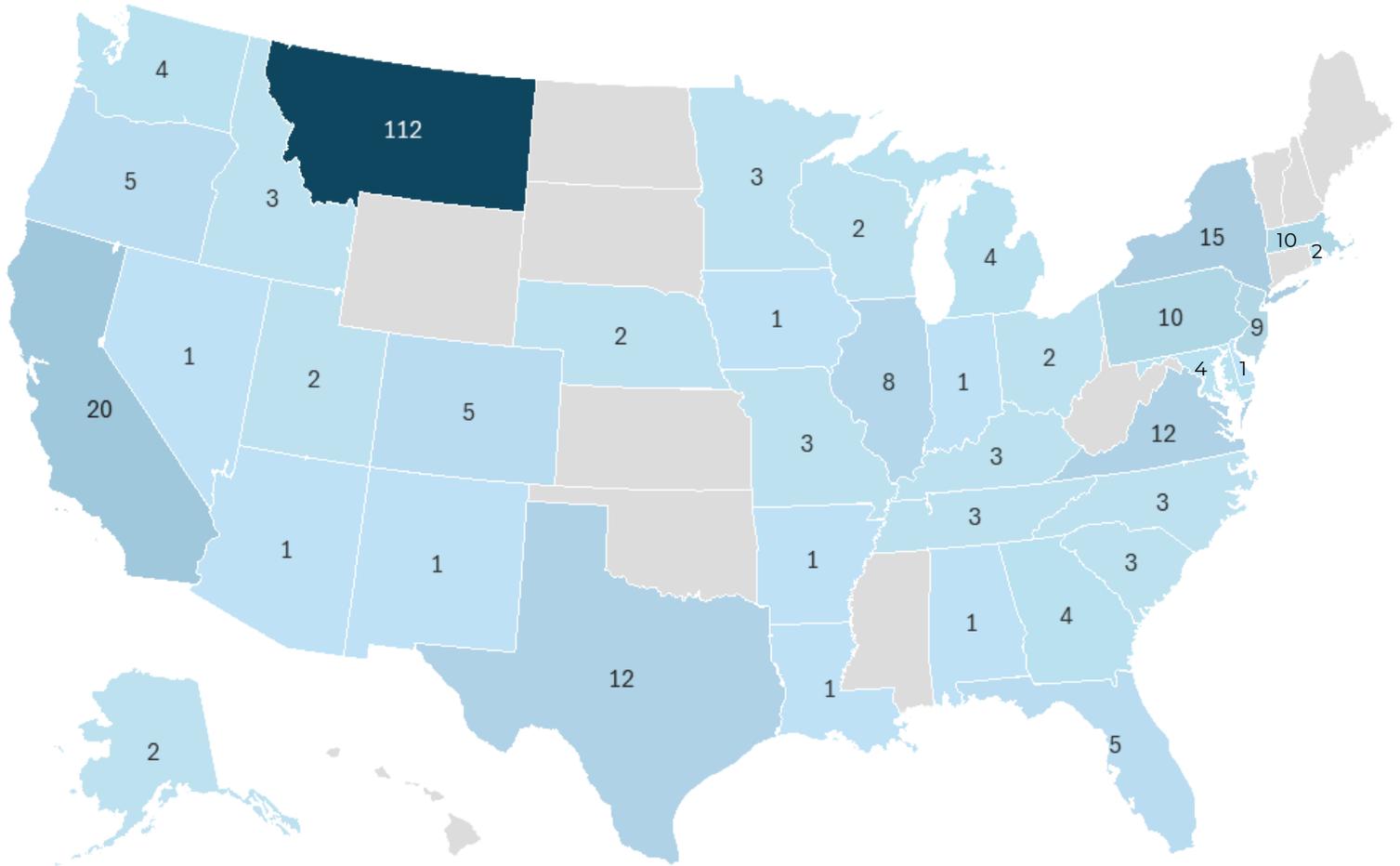


Top Companies in Montana

- [Providence](#) (44 Jobs)- Missoula
- [State of Montana](#) (37 Jobs)- Helena
- [Intermountain Health](#) (22 Jobs)- Butte
- [Billings Clinic](#) (17 Jobs)- Billings
- [Snowflake Computing](#) (15 Jobs)- Bozeman
- [Northwestern Energy](#) (14 Jobs)- Missoula
- [The University of Montana](#) (8 Jobs)- Missoula
- [Spectrum](#) (8 Jobs)- Billings
- [Farm Service Agency](#) (7 Jobs)- Bozeman
- [Social Finance](#) (6 Jobs)- Helena

EMPLOYERS

Of the 310 unique companies posting this year, 307 were U.S.-based (including 17 staffing agencies that did not list a location) and 3 were international.



The total reflects all postings in Montana, though some positions are located outside the U.S. and some staffing agencies do not specify the location.

Top Companies Posting for Q3

- [Oracle](#) (32 Jobs)- Austin, TX
- [Deloitte](#) (24 Jobs)- New York City, NY
- [Ford](#) (24 Jobs)- Dearborn, MI
- [Marriott International](#) (23 Jobs)- Bethesda, MD
- [Humana](#) (22 Jobs)- Louisville, KY
- [Lumen Technologies](#) (20 Jobs)- Monroe, LA
- [Prime Therapeutics](#) (20 Jobs)- Eagan, MN
- [Cardinal Health](#) (19 Jobs)- Dublin, OH
- [Meta](#) (18 Jobs)- Menlo Park, CA
- [Cribl](#) (17 Jobs)- San Francisco, CA

	Total	In-State	Out-Of-State
Employers	310	112	198
Job Postings	1,201	366	835

Job seekers can prepare for a career in cybersecurity by developing skills that enhance their employability. While some roles may require a diverse array of skills to be successful, others may need more targeted skills. Carefully review job postings to assess the current disciplinary needs.

The following summarizes the top skills requested in job postings in Q3 2024.

Transferable Skills

% of Total Postings

Communication- 39
 Management- 35
 Problem Solving- 30
 Leadership- 25
 Troubleshooting (Problem Solving)- 25
 Customer Service- 24
 Operations- 21
 Research- 17
 Information Technology- 17
 Detail Oriented- 16

Lightcast (2024)

Technical Skills

% of Total Postings

Computer Science- 34
 SQL (Programming Language)- 21
 Project Management- 17
 Agile Methodology- 17
 Python (Programming Language)- 17
 Data Analysis- 16
 Software Development- 14
 Automation- 14
 Software Engineering- 14
 Microsoft Azure- 14

Lightcast (2024)

Software Skills

% of Total Postings

SQL (Programming Language)- 21
 Python (Programming Language)- 17
 Microsoft Azure- 14
 Amazon Web Services- 13
 Java (Programming Language)- 11
 Microsoft Excel- 9
 Microsoft Office- 9
 Operating Systems- 9
 Application Programming Interface(API)- 9
 JavaScript (Programming Language)- 9

Lightcast (2024)

Student Tip!

Students can strategically tailor their resume to align with the qualifications laid out in a job listing by highlighting how their academic knowledge and campus experiences serve as meaningful professional development.

CERTIFICATION:

CompTIA
Security+
Certification

Global Information
Assurance
Certification (GIAC)

Certified Information
Privacy Professional
(CIPP)

Certified Information
Systems Security
Professional (CISSP)

Certified
Information Systems
Auditor (CISA)

Certified Information
Security Manager
(CISM)

PREREQUISITES:

- No formal prerequisites laid out
- 2 years of IT administration experience suggested
 - Security focused experience
- No formal prerequisites for any professional or applied knowledge exam
- Professional trainings or experiences recommended
- 3 years work experience
 - Data privacy representing 50% of job duties
 - Additional certification = 1 year experience
- References and personal statement required
- 5 years cumulative, full-time work experience
 - Higher education = 1 year of experience
 - Additional credentials = 1 year of experience
- Experience in the 8 domains of Information Security
- 5 years cumulative, full-time work experience
 - General Work Experience Waiver - *optional*
 - Multi-level Education Experience Waiver - *optional*
- Minimum 2 years experience from 1 of 5 CISA domains
- 5 years cumulative, full-time work experience
- 120 Continuing Professional Development (CPE) hours
 - 3 years to complete hours

Student Tip!

Certifications are more than credentials, they are career-building tools that can advance your career through new opportunities, promotions, and benefits. Start by clarifying the career path you want and determine what certification is needed.

A SOC Analyst...

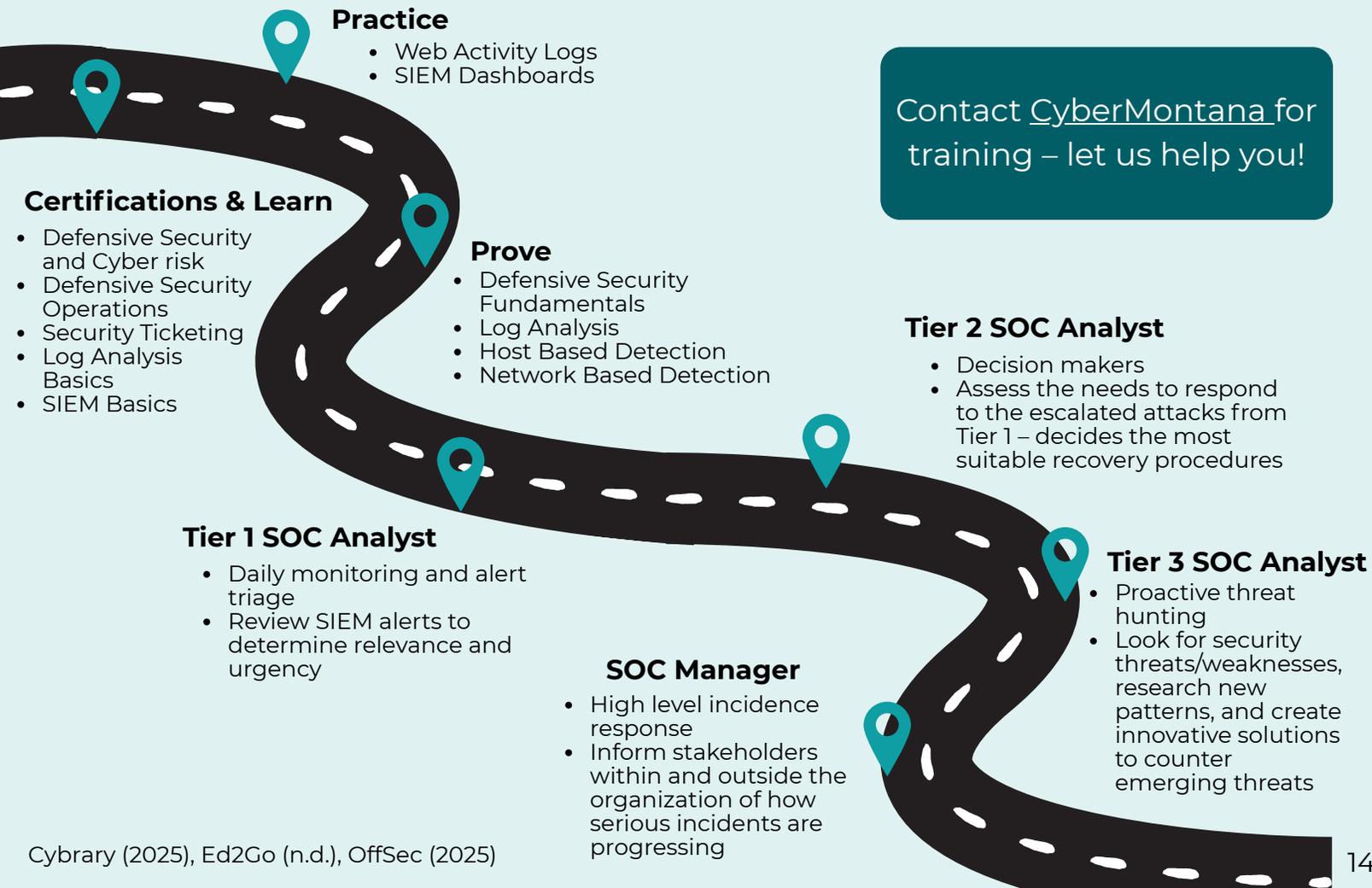
Is a member of a specific Security Operations Center (SOC) team or facility. They are responsible for keeping an eye on potential threats, quickly identifying suspicious activity, and responding to security incidents. SOC Analysts are the first line of defense for cyber-attacks.

Main Responsibilities:

- Security Monitoring
- Incident Detection
- Incident Response
- Alert Triage
- Using Threat Intelligence
- Log Analysis
- Security Tool Management
- Documentation

Key Skills:

- Technical Proficiency
- Hands-On Security Tools
- Coding Know-How
- Forensics Knowledge
- Incident Response
- Understanding Attack Patterns
- Team Player
- Adaptability
- Problem-Solver



Practice

- Web Activity Logs
- SIEM Dashboards

Certifications & Learn

- Defensive Security and Cyber risk
- Defensive Security Operations
- Security Ticketing
- Log Analysis Basics
- SIEM Basics

Prove

- Defensive Security Fundamentals
- Log Analysis
- Host Based Detection
- Network Based Detection

Tier 1 SOC Analyst

- Daily monitoring and alert triage
- Review SIEM alerts to determine relevance and urgency

SOC Manager

- High level incidence response
- Inform stakeholders within and outside the organization of how serious incidents are progressing

Contact [CyberMontana](#) for training – let us help you!

Tier 2 SOC Analyst

- Decision makers
- Assess the needs to respond to the escalated attacks from Tier 1 – decides the most suitable recovery procedures

Tier 3 SOC Analyst

- Proactive threat hunting
- Look for security threats/weaknesses, research new patterns, and create innovative solutions to counter emerging threats

DEVELOPMENT

Industry Recognized Credentials (IRCs) provide a great starting point for those entering the field of cybersecurity as well as those wishing to increase their knowledge, skills, and career opportunities.

CyberMontana's Certificate of Technical Studies programs assist students in gaining appropriate training and education to complete the CompTIA Network+ and CompTIA Security+ exams. These standard entry-level IRCs align with qualifications for the U.S. Department of Defense Information Assurance Technology and Management job categories.

Cyber Rapid Training Program

1

The Cyber Rapid Training Program is designed for adult learners looking to enter entry-level cybersecurity or IT careers, as well as individuals in these careers seeking upskill. Courses take place over 10-15 weeks fully online.

The program covers basic networking, operating systems, ethical and legal issues, communication skills, and cybersecurity. Completion qualifies students for CompTIA, Network+, and CompTIA Security+ credentials, aligned with U.S. Department of Defense job categories.

Cybrary Course Offerings

2

In collaboration with Cybrary, our team at CyberMontana will work with you to set specific goals and provide recommendations to get you started, and help you find courses/course sequences. Training is available for both private and public sectors.

Courses align with the 41 NICCS work roles outlined by the workforce framework for cybersecurity.

Ed2Go Course Offerings

3

Are you looking for cybersecurity training programs that can be filtered to fit your specific needs? Our courses offered in partnerships with Ed2Go can be filtered by sector, length of courses, DoD approval, featured courses, and voucher availability.

Financial assistance is available for Ed2Go courses in addition to the Advanced Career Training and Fundamentals Military Scholarships. Ed2Go courses may be covered or funded through the Workforce Innovation and Opportunity Act (WIOA). Contact us for more details.

Montana Code School

4

Become a software developer in 18-weeks through the Montana Code School Coding Boot Camp. Through this part-time, flexible, and affordable boot camp you can become a Front End Software Developer or Back End Software Developer.

Students meet for class once a week at a set time in a virtual environment. In addition to the weekly class meeting, students meet once a week for remote, 20-minute one-on-one with a mentor.

SUMMARY

CyberMontana provides this job report summarizing current and historical cybersecurity job postings in the state of Montana. Job seekers can use these insights to better understand in-demand skills, emerging job opportunities, and better position themselves for cybersecurity roles.

The Key Takeaways for the 2024 Quarter 3 Job Report are:

- In Quarter 3, there were **1,201 jobs advertised**.
- Of these jobs **366 were physically located in the state. 93% of them were advertised in the largest 7 cities in Montana.**
- **310 employers advertised in Montana. 112 were located here and 198 were located elsewhere.**
- From July 2023 to June 2024, the **modeled quarterly statewide hiring estimate averaged 1,299 roles.**

Additional Key Takeaways for Q3:

- **Staffing companies are great resources for employees** looking for temporary, permanent, or contract positions.
- **Software Development has been the top occupation for all three quarters of 2024** – remaining a high demand field.
- **Skill-building through hands-on experience and credentialing** are extremely important for employability and job growth.

