

State Information Technology Systems Division (SITSD) JAMES ZITO

CISSP-ISSAP, GCFE, SECURITY+, NETWORK+, A+, ZTX-I

SECURITY ARCHITECT

jzito@mt.gov

LinkedIn: https://www.linkedin.com/in/jameszito

Department of Administration - SITSD

As the Department of Administration, we provide hosting services and cloud support to all agencies within the state who are providing public services to our citizens. Services such as law enforcement, child support, mental health, tax filing, hunting and fishing licenses, natural resources, road conditions, and a lot more!

Cybersecurity is important for our agency as we are responsible for securing the infrastructure the agencies use to store their sensitive citizen data. Typical tasks would include:

- Assessing risk of information systems using vulnerability and configuration compliance scanning.
- Threat hunting for indicators of compromise (IOC's) in the environment.
- Responding to security incidents.
- Architecting new security solutions or requesting changes to current infrastructure to enhance our security posture and reduce our threat exposure.



An average day in the life of a Cybersecurity professional

Varies depending on the specialty the individual is responsible.

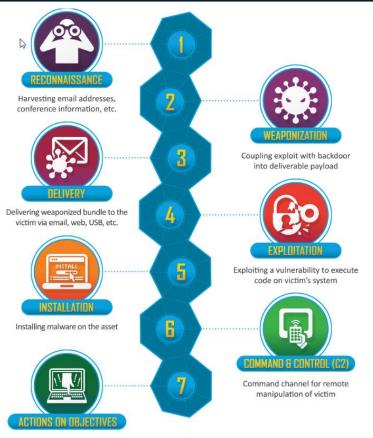
- Incident responders are like firefighters. They respond to reported security incidents but, in their downtime, must maintain their tools and be more proactive in performing threat hunting.
- Risk Management groups evaluate systems by doing risk assessments and help to make sure IT operations are within compliance of our security policies and regulatory bodies such as the IRS, HIPPA, and more.
- Security Architecture performs daily reviews of firewall requests making sure the least amount of access is approved. I help determine the security needs of the enterprise, design architecture, research solutions, drive assessment of those solutions in proof of concepts, and drive technology deployment projects from to meet our needs from a security perspective.



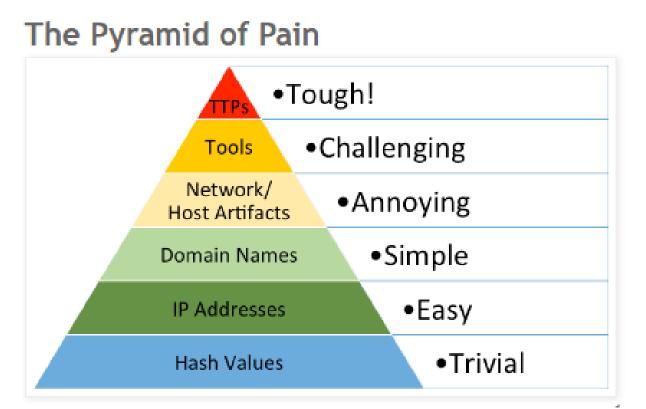
Tips/Advice for students pursuing career in Cybersecurity

- Get as much experience as you possibly can in the information technology field even if it's an entry level administrator role.
- Develop an attention to detail as that is a critical skillset.
- Stay up to date with the latest cybersecurity news.
- Try to get core entry level certifications like CompTIA Network+, Security+, or CySA.
- Learn how information systems perform logging and how to filter logs.
- If you can, try to use technical examples in interviews.
- Learn what the "Cyber Kill Chain" and the "Pyramid of Pain" is and think like a hacker when asked questions you're not sure about in interviews.
- Have a passion for security.

Cyber Kill Chain & Pyramid of Pain



With 'Hands on Keyboard' access, intruders accomplish their original goals



https://www.lockheedmartin.com/enus/capabilities/cyber/cyber-kill-chain.html http://detect-respond.blogspot.com/2013/03/thepyramid-of-pain.html

Cybersecurity Information Resources

- https://www.cisa.gov/
- https://www.darkreading.com/
- https://krebsonsecurity.com/
- https://cyberscoop.com/
- https://www.csoonline.com/
- https://thehackernews.com/



Cybersecurity Training Resources

- FedVTE <u>https://fedvte.usalearning.gov/public_fedvte.php</u>
- SANS.org <u>https://www.sans.org/webcasts/?msc=main-nav</u>
- ISC2 <u>https://www.isc2.org/News-and-Events/Webinars</u>
- BrightTALK <u>https://www.brighttalk.com/topic/cyber-security/</u>
- Cybrary <u>https://www.cybrary.it/</u>



Typical interview questions for cybersecurity

- Can you tell us what the difference between a risk, vulnerability, and an exploit is?
 - Risk the potential for loss and damage when the threat occurs.
 - Vulnerability exposes the organization to a threat.
 - Exploit code to take advantage of a vulnerability.
- If you were to focus your cybersecurity efforts on mitigation vulnerabilities or threats, what would it be and why?
 - Vulnerabilities because those are things you can control. Threats you cannot.
- What is your understanding of cybersecurity, and what do you think are the biggest threats to organizations today?
- What steps might you take to contain and mitigate an incident?
- Can you describe a time when you detected and responded to a security incident? Or if recent graduate, can you describe how your classes taught you to detect and responded to a security incidents?



Cybersecurity Job Postings for Montana State Government

MONTANA.GOV > Employment > State Careers

DIVISION NAME

MONTANA.GOV OFFICIAL STATE WEBSITE EMPLOYMENT STATE CAREERS

CAREER OPPORTUNITIES

Career Section (View or apply for state jobs)

MONTANA.C				SERVI	ICES AGENCIES LOGIN S
	Welcome. You are not signed in.				STATE OF MONTANA CAREERS Sign In
	Job Search My Jobpage	Location Organization			View All Jobs
	Job Openings 1 - 15 of 15				Advanced Search
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		Job Title	Location	Agency	Actions
		Application Portfolio Manager (66644)	Helena	Department of Administration	Apply :≡•
the hast	Kalispell (1) Bozeman (1)	Court Recording Coordinator	Helena	Judicial Branch	Apply :=+
	Show more See all locations	Data Systems Manager (37403)	Helena	Department of Public Health & Human Services	Apply :=-
	✓ Job Field Job Categor Healthcare (59) Community/Social Services (57) Office/Administrative/Clerical (48) Security/Protective Services (45) Transportation (24) Business/Analyst/Statistics (22) Legal (20) Buding/Grounds Maintenance (19) Education/Training (19) Minformation Technology/Computer Science (15) Show less See all Job fields	Database Administrator- Hybrid (66455)	Helena	Department of Administration	Apply III+
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		DevOps Engineer (11888)	Multiple Locations	Department of Fish, Wildlife & Parks	Apply ≔•
		IT Security Analyst	Helena	Judicial Branch	Apply ≡•
		IT Systems Analyst	Helena	Department of Commerce	Apply ≔•
		Network Systems Analyst	Miles City	Department of Fish, Wildlife & Parks	Apply =-
		Splunk Administrator - Hybrid (66130)	Helena	Department of Administration	Apply :≣▼
		Sr Software Engineer	Helena	Legislative Branch	Apply ≡•
		Systems Analyst – SABHRS Financials	Helena	Department of Administration	Apply :≣▼
		Treatment Court Teleservices Coordinator	Helena	Judicial Branch	Apply ≣*
		Webmaster	Helena	Legislative Branch	Apply i≡•
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Questions?



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