

SARAH MORSHED

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EDUCATION

Bachelor of Computer Science Degree (Minor in Mathematics) | CGPA: 3.71 | *Dalhousie University*

- Certificate in Communication Technologies and Cyber Security

Oxford Study Abroad Program (OSAP) | *University of Oxford*

- Advanced Data Structures and Algorithms, Principles of Programming languages, Software Engineering achieving grade Alpha (which is equivalent to A+)

- Featured on [Dal News](#) for being the **first Dal Faculty of Computer Science student** selected for OSAP

TECHNICAL SKILLS

AI & Machine Learning: LLMs, Agentic Workflows, MCP, Prompt Engineering, Pydantic AI, Data Pipelines, MLOps, CI/CD

Programming: Python, Java, SQL, JSON, PowerShell, JavaScript, MATLAB, PHP, Git, Agile, SDLC

Risk, Compliance, & Data Governance: NIST CSF, Identity and Access Management (IAM), Least-Privilege Enforcement, Automated Auditing, Cloudsplaining, Data Security, GDPR, PCI DSS, Access Control

Security & Networking: Network enumeration, vulnerability assessment, Metasploit exploitation, Wireshark packet analysis, TCP/IP troubleshooting, ARP/DNS analysis, MITRE ATT&CK

Cloud & Systems: AWS, IAM, Active Directory, Linux, SharePoint

Tools & Platforms: Wireshark, Metasploit, Nmap, ServiceNow, Microsoft 365, ConnectWise, Kubernetes, Splunk

SOFT SKILLS Analytical & Critical Thinking, Problem Solving, Attention to Detail, Leadership, Team Coordination, Technical Communication, Public Speaking & Presentation, Cross-functional Collaboration, Initiative, Adaptability

WORK EXPERIENCE

FCS Student Engagement Leader | *Dalhousie Faculty of Computer Science*

Sept 2023 - May 2025

- Collaborated with faculty leadership to develop communications guidelines and programming policies, achieving a **20% increase in student participation**
- Built cross-stakeholder consensus to align institutional and student priorities, producing documentation and best practices adopted across the faculty
- Led the inaugural **Summit for Women in Tech**, coordinating faculty, student groups, and external partners end-to-end
- Designed and delivered an interactive workshop on 'AI Life Hacks for Success' for students, faculty and industry professionals, showcasing practical applications of AI tools to optimize workflow efficiency

Technical Support Engineer Co-op | *SolutionInc. Ltd.*

Sept 2023 - Dec 2023

- Monitored and troubleshooted network and connectivity issues, supporting reliable access for 100s of users
- Responded to incidents and service requests, following structured triage and escalation processes
- Collaborated with internal teams to resolve issues efficiently while maintaining clear communication

IT Operations Specialist Co-op | *High Liner Foods Incorporated*

May 2022 - Dec 2022

- Delivered Tier 1–2 technical support across Canada and the U.S., triaging and resolving incidents using ServiceNow
- Migrated 250+ intranet pages from legacy platform to Microsoft SharePoint in under two months using a Lift & Shift strategy, implementing governance controls including user roles and access management to improve data security
- Conducted vendor research and architecture analysis across multiple IPaaS platforms, evaluating software compatibility, integration capabilities, and budget constraints, then formulated and presented a recommended modernization strategy to IT Directors, VPs, and the CFO

- Partnered with the Business Architecture team to gather and validate requirements for the *askIT* dashboard, executing test plans after each update and systematically documenting findings for development resolution
- Submitted the **winning** nomination for **Dalhousie Top Co-op Employer of the Year – Manufacturing (2022)**, recognizing an exceptional co-op experience and impactful project contributions

SELECTED CONFERENCES & TRAINING

Atlantic Security Conference (ATLSECCON) <i>Volunteer</i>	2026
Women in Tech (WIT) – Maritimes Chapter <i>Talent Scout Lead – Executive Team</i>	2026
ShiftKey x Women in Tech Hackathon <i>Judge and Mentor</i>	2025
Women in CyberSecurity (WiCyS) <i>Member</i>	2025
DEFSEC Atlantic Conference <i>Atlantic Canada Aerospace & Defence</i>	2023
NASA International Space Apps Challenge <i>Hackathon by NASA</i>	2023
NorthSec Cybersecurity Conference & CTF <i>Montreal, QC</i>	2023
Youth Panelist – Council of CIOs <i>Conference Board of Canada</i>	2022
Introduction to Cybersecurity Certificate <i>Cisco Networking Academy</i>	2020

AWARDS & CERTIFICATES

ISC2 CC – Certified in Cybersecurity (<i>In Progress</i>)	[Expected July 2026]
Cybersecurity – Growth Edition: Skills for Hire Atlantic (Final Score: 95%) <i>Digital Nova Scotia</i>	2026
Leacross Foundation Leadership Scholarship Award (\$10,000) <i>Leadership, mentorship, and engagement as a female student in STEM.</i>	2024
SPFFPC – Fiber Fit Partner Certification <i>CommScope Infrastructure Academy</i>	2023

LEADERSHIP & VOLUNTEER EXPERIENCE

Vice President <i>Dalhousie Golden Key Honour Society</i>	July 2023 - July 2024
<i>Recognized among top 15% of students and part of global honor society.</i>	
• Co-led operations and organized major events including blood drives, charity, and innovation panels.	
Women in STEM Society Mentor <i>Dalhousie University</i>	Oct 2022 - July 2024
• Mentored students in technical and academic development promoting professional growth in STEM.	

SELECTED PROJECTS ([GitHub](#))

MCP-Enabled Cloud Risk & Compliance Agent (Python, OpenAI, AWS IAM)

- Engineered a deterministic, MCP-enabled Agentic AI workflow utilizing Python to autonomously ingest and triage complex AWS IAM infrastructure configurations.
- Designed a hybrid compound AI system featuring a programmatic Python rule engine for zero-hallucination vulnerability detection, leveraging OpenAI's structured outputs (Pydantic) for contextual risk analysis.
- Automated the generation of timestamped audit artifacts detailing precise, JSON-formatted least-privilege policy remediations aligned with the Cloudsplaining security framework.

AWS Automated Threat Detection & Response (PluralSight Lab Environment)

- Built an event-driven incident response pipeline using GuardDuty, EventBridge, Lambda, and SNS to automatically detect and contain threats in real time without manual intervention.
- Isolated compromised EC2 instances using Python Lambda Function by replacing their security groups with a containment group upon critical finding detection.
- Integrated SNS email alerting to ensure full SOC visibility throughout the containment lifecycle.

AWS S3 Zero Trust Security & IAM Access Control (AWS Lab)

- Designed a zero-trust S3 access model following NIST SP 800-207 principles, enforcing least-privilege IAM and bucket policies, AES-256 encryption, and full public access blocking, validated through AWS CLI testing
- Integrated CloudTrail logging and CloudWatch monitoring with SNS alerting to maintain a full audit trail and enable real-time detection of unauthorized actions