

Madjda FARES

+1 263-866-8867 | madjda.fares@umontreal.ca | [madjda FARES / LinkedIn](#) | [Madjda32-del / github](#)

EDUCATION

PhD Student in Computer Science <i>Université de Montréal, DIRO, Baudry Lab - Quebec</i>	Jan 2026 - present
Engineering Degree in Software Engineering, specialization: Cybersecurity <i>École Supérieure des Sciences et Technologies de l'Informatique (ESTIN) - Bejaia</i> 15.30 /20	Dec 2020 - Sep 2025
Master's Degree in Software Engineering, specialization: Cybersecurity <i>École Supérieure des Sciences et Technologies de l'Informatique (ESTIN) - Bejaia</i> 15.83 /20	Jun 2023 - Sep 2025
Maths Baccalaureate's Degree <i>Teyssir School - Algiers</i> 16.19 /20	Sep 2020

EXPERIENCE

Research Intern, Software Engineering (CI/CD Security) <i>Université de Montréal, DIRO, Baudry Lab - Quebec & Remote</i>	Feb 2024 - Sep 2025
. Studied GHA supply-chain exposures and compared 9 scanners on coverage, detection, and runtime, delivering hardening steps.	
. Built a taxonomy of 10 workflow security weaknesses and a curated benchmark of 596 real workflows.	
. Co-authored a research article titled " Unpacking Security Scanners for GitHub Actions Workflows ".	
Information Systems Security Manager Intern <i>Ministry of Energy of Algeria - Algiers</i>	
. Conducted a phishing simulation with Social-Engineer Toolkit to assess vulnerabilities and raise cybersecurity awareness.	
. Configured email security protocols (SMTP authentication, SPF) increasing the probability of bypassing spam filters by 84% .	
. Troubleshooted and resolved network configurations and proxy issues, achieving 99% system uptime for email services.	

Database Administrator Intern <i>Hamoud Boualem - Algiers</i>	Jun 2023 - Jul 2023
. Managed a SQL Server-based complaint management web-app, overseeing all aspects of system functionality.	
. Focused on database design and optimization, implementing best practices to enhance data storage.	
. Ensured efficient data handling, leading to improved overall system performance.	

PROJECTS

Capture The Flag Competitions (CTF) . Applied offensive security techniques to solve real-world problems enhancing team collaboration (7th out of 20 - NexZero).	IngeHack - CSAW'24 - PicoCTF - NexZe	Mar 2024 - Feb 2025
Reproduced and Analyzed GitHub CI/CD Workflow Security . Reproduced a key study on GitHub CI workflows, focusing on workflow triggers and permissions security vulnerabilities using a dataset of 200,000 workflows.		
. Developed a robust pipeline for data collection, YAML parsing, and trigger event extraction using tools like pandas, YAML, and matplotlib.		
. Validated results against the original research, highlighting security risks and proposing improvements to workflow configuration and permissions.		

Building a SIEM Lab . Configured Elastic Stack (Elasticsearch, Logstash, Kibana) to establish a robust (SIEM) environment.	Sep 2024
. Developed expertise in real-time log analysis and security monitoring, enabling effective threat detection and response.	
. Set up alerts for security incident detection, significantly enhancing incident detection speed and responsiveness.	

Vulnerability Management . Conducted comprehensive vulnerability assessments with Nessus, reducing critical vulnerabilities from 23% to 2.2% .	Aug 2024
--	----------

Advanced Cryptography . Implemented cryptographic algorithms (RSA, Elgamal, miniAES, miniDES, ECC, Schnorr, Rabbit) to enhance security.	Feb 2024 - Jun 2024
--	---------------------

Network Security Assistant Application	<i>ESTIN</i>	Nov 2023 – Jan 2024
. Developed an intrusion detection application using Python, increasing network security by proactively identifying threats.		

Hackathons	<i>Junction Algiers Hackathon, Micro Club Hackathon</i>	Mar 2023 – Oct 2023
. <u>Transportation Management Application</u> : Developed a system for optimizing transportation routes and schedules.		
. <u>Movement Tracker</u> : Created a web app to track employee movement, utilizing backend development with Node.js.		

DDOS Attack Simulation	<i>ESTIN</i>	May 2023
Dentist's Office Management Application (.NET C#)	<i>ESTIN</i>	Feb 2022 – Jun 2022

SKILLS

Cybersecurity: Nmap, Scapy, SET, Wireshark, Cisco Packet Tracer, Audits, Nessus, DNS Lookups, OSINT, Forensics, OWASP

CI/CD & DevOps: GitHub Actions, YAML, Docker, Git

Operating Systems & Cloud: Windows, Ubuntu Linux, Kali Linux, Microsoft 365, VirtualBox, VMware

Programming Languages: C#, Java, Python (pandas, matplotlib), C, Matlab, Assembly

Hardware Development : Arduino

Web Development: HTML, CSS, Node.js, ReactJS, Postman

Database: SQL, MongoDB, NoSQL

Design: Figma, Adobe XD, Photoshop

Multimedia: Photography, Adobe Lightroom

SCHOLARSHIPS & CERTIFICATIONS

Mitacs Globalink scholarship	<i>Canada</i>	2025
Supporting the Université de Montréal research internship		
Junior Cybersecurity Analyst (Career Path)	<i>Cisco Networking Academy</i>	Jul 2024 – Oct 2024
. Introduction To Cybersecurity	. Networking Basics	
. Networking Devices and Initial Configuration	. Endpoint Security	
Blockchain Basics	<i>Great Learning</i>	Oct 2024
Junior Full Stack Web Developer	<i>FreeCodeCamp</i>	Apr 2024 – Oct 2024
. JavaScript Algorithms and Data Structures	. Front End Development Libraries	. Back End Development and APIs

INVOLVEMENT

Multimedia Department Manager	<i>ByteCraft Club - ESTIN</i>	Sep 2021 – Jun 2024
. Managed multimedia content, and led photography teams, achieving a 60% increase in social media.		
External Relations Department Member	<i>Nexus Security Club - ESTIN</i>	Sep 2023 – May 2024
Photography Team Leader	<i>School Of AI Club - ESTIN</i>	Sep 2022 – Jun 2023
STEM Community Engagement	<i>STEAM Center - World Learning Algeria</i>	Jun 2019 – Nov 2020

LANGUAGES

Arabic (Native)	Kabyle (Native)	English (Fluent)	French (Fluent)	Turkish (Intermediate)	Spanish (Beginner)
------------------------	------------------------	-------------------------	------------------------	-------------------------------	---------------------------