

NEDELCU BIANCA-NICOLETA

+40 765 237 803 | nedelcubianca40@gmail.com | [linkedin.com/in/nedelcu-bianca-nicoleta/](https://www.linkedin.com/in/nedelcu-bianca-nicoleta/) | github.com/nedelcubianca | Bucharest, Romania

Professional Summary

Systems Engineering student aspiring to build a career in cybersecurity, currently expanding practical defensive skills at the Security Summer School organized by the ACS Faculty (UNSTPB). Highly active on Hack The Box, where I continuously solve challenges and master new concepts related to security monitoring, alert triage, and incident response. Proven ability to analyze complex threats, demonstrated by presenting research on AI-generated attacks at NATO STO. Eager to bring my passion for continuous learning and analytical problem-solving into a Blue Team environment.

Professional Experience

Student Intern - Cybersecurity & Quantum Technologies · *The National Institute for Research & Development in Informatics - ICI Bucharest* Jun 2026 – Present

Bucharest, Romania

- Conduct comparative research on Post-Quantum Cryptography (PQC) versus classical cryptographic models, evaluating technical characteristics, advantages, and vulnerabilities alongside a research team
- Simulate Quantum Key Distribution (QKD) protocols across custom network topologies utilizing QKDNetSim and Python libraries to test next-generation secure communications

Cybersecurity Intern · *MGNG Limited*

Dec 2025 – May 2026

Remote / United Kingdom

- Conducted in-depth research on AI-powered cyber threats targeting military critical infrastructure, synthesising findings into a comprehensive analysis co-authored and presented as an invited speaker at NATO STO IST-238 Research Specialists' Meeting (Wachtberg, Germany, 2026)
- Co-authored and presented an analysis on predictive cyber defense and the GTG-1002 AI-orchestrated attack case as an invited speaker at the NATO STO IST-238 Research Specialists' Meeting (Wachtberg, Germany, 2026)
- Attended industry conferences and events focused on defence, cybersecurity, and emerging threats, gaining exposure to current developments and expanding professional network within the security community

Education

B.Sc. in Computer Science & Automatic Control · *Politehnica University of Bucharest, Faculty of Automatic Control and Computers* Oct 2023 – Jun 2027

Bucharest, Romania

- Relevant coursework: Introduction to Cybersecurity, Computer Systems Security, Web Application Security, Cloud Security, Computer Networks, Operating Systems

Projects

Network Traffic Music Composer

Python, Networking, Packet Analysis, Data Parsing

- Developed a system to capture, parse, and transform real-world network traffic and PCAP files into structural audio patterns
- Analyzed packet characteristics, protocols, and statistics to map network behavior, demonstrating strong foundational knowledge of data encapsulation and traffic monitoring

Auto File Organizer

Python, Watchdog, Automation

- Engineered a Python-based automation script utilizing the Watchdog library to monitor directory events in real-time
- Implemented logic for automated categorization and duplicate removal, demonstrating skills directly applicable to SOC log management and system monitoring

Password Strength Checker

HTML, CSS, JavaScript, Web Crypto API, HIBP API

- Developed a privacy-focused password evaluator using SHA-1 k-anonymity to check breach exposure via the HIBP API without transmitting full passwords
- Implemented detection for dictionary words, leet substitutions, and keyboard walks to assess authentication vulnerabilities

Technical Skills

Core Competencies	Log Analysis	Threat Intelligence		Digital Forensics		Incident Response
	Cryptography					
Security & Monitoring	Linux	Wireshark	Nmap	Burp Suite		
Programming Languages	Python	Bash	C/C++	Java	JavaScript	SQL
Tools	Git	Packet Tracer		VS Code		

Certifications & Courses

Red Hat System Administration II & I (RH134 & RH124 - RHA) · Red Hat	2026
CCNA: Switching, Routing and Wireless Essentials · Cisco	2025
CCNA: Introduction to Networks · Cisco	2025
Applied Web Application Security · Metropolia University (DECAMP Erasmus+)	2025
Cloud Computing Security · Universidad de Cantabria (DECAMP Erasmus+)	2025
Cyber Security 101 · TryHackMe	2025
DefCamp Workshop: Introduction in Red Teaming & Penetration Testing · DefCamp	2025