



# Mehdi Benkaouz

## curriculum vitae

### ABOUT ME

My name is Mehdi Benkaouz, I am a 25 y/o computer scientist mainly interested in Theoretical and Computational Computer Science and related fields. I currently work in Bologna. "My professional goal is to build reliable and scalable IT infrastructures through automation, documentation, and continuous improvement.

### WORK EXPERIENCE

#### Toyota Material Handling Italia — ICT Developer 2025

Active Directory and SCCM administration in enterprise environments. Standardized software deployment processes and managed OS imaging (Windows 10/11). Created internal documentation and runbooks to streamline recurring tasks and reduce downtime. Supported automation of workstation setups and policy enforcement through Group Policy and CMDB tracking.

#### Aubay Italia, Bologna — IT Specialist 2022-2025

Worked in the Bologna office and on-site at Maserati for an industrial digitalization project. Configured and tested GOMA industrial computers, performing diagnostics and quality assurance. Enhanced networking expertise through practical configuration of IP, DNS, DHCP, VLANs, trunking, and routing. Used Fortinet/FortiGate and Cisco switches for VPN and firewall setups. Implemented centralized backup and imaging systems using Acronis; created automated drivers and package installations. Conducted low-level operations via Telnet and embedded interfaces on industrial devices. Utilized Wireshark for network monitoring and troubleshooting.

#### GPI Group (Sant'Orsola Hospital, Bologna) — Help Desk Technician 2022

Delivered first-line IT assistance in a critical healthcare environment. Performed remote troubleshooting, system updates, and incident triage. Created concise KB articles to prevent repetitive ticketing and improve service desk efficiency.

#### Roberto Nuti Group — IT Support Technician 2021 – 2022

Provided full-time support for networks, telecommunications, and endpoint maintenance. Tracked IT expenses, monitored hardware inventory, and optimized workstation selection for different roles. Developed internal documentation and checklists for consistent onboarding and troubleshooting processes.

### Bologna Prosecutor's Office — Documentation & Data Handling 2019–2020

Managed official document archiving and assisted in structured data analysis for case processing. Maintained confidentiality and ensured compliance with organizational data standards.

### Hackathon Bologna 2019 — Winner — Digital Innovation Team Project

Developed a concept for urban digitalization and sustainability in collaboration with local authorities. Proposed integrated systems for smart-city management, data flow, and civic engagement.

### EDUCATION

Diploma in Information Technology and Telecommunications. Focus on Cloud Security, AWS concepts, Network Administration, and Business Intelligence. Final project: analysis and optimization of enterprise networks.

### LANGUAGE

Italian (native)  
Arabic (native)  
English (B1 - Intermediate)

### PROGRAMS THAT I KNOW AND USE REGULARLY

Photoshop, Illustrator, InDesign, After Effects, FL Studio, Visual Studio Code, Wordpress, Audacity, Office package, VMWare Workstation

### CORE COMPETENCIES

Networking & Administration — Configuration and troubleshooting of Cisco switches, Fortinet/FortiGate, and enterprise network environments. Skilled in IP planning, subnetting, DNS, DHCP, VLAN, trunking, static and dynamic routing, and VPN setup.

Operating Systems — Proficient in Windows 10/11 Enterprise, macOS, and Linux distributions including CentOS 7–9 Stream and Ubuntu; experience with OS deployment and system hardening.

System Imaging & Backup — Advanced use of Acronis for system imaging, disk cloning, backup scheduling, recovery, and centralized management. Competent in driver packaging and automated software deployments for enterprise environments.

Security & Remote Access — Configuration of Windows Firewall, VPNs, and encrypted environments; experience with Telnet connections to embedded systems and industrial machines with custom interfaces.

Software & Creative Tools — Skilled with Microsoft Office Suite, Adobe Photoshop, Illustrator, After Effects, Premiere Pro, AutoCAD, and Google Cloud tools.

Programming & Scripting — Working knowledge of Python, Java, HTML, JavaScript, CSS, PHP, Batch scripting, and Kivy framework for lightweight GUI applications.

Artificial Intelligence & Automation — Familiar with next-generation AI platforms including ChatGPT, Gemini AI, and Midjourney, used for ideation, automation support, and workflow optimization.

Diagnostics & Analysis — Experience with Wireshark and NirSoft network utilities for real-time monitoring, log analysis, and problem isolation across local and industrial networks.

*Currently applying these skills in enterprise-grade infrastructures.*

### IT Skills Acquired Independently

BitLocker Management — Full configuration and maintenance of disk encryption, including USB key unlocking, recovery key backups, and multi-device deployment procedures.

Local Security Policies — Advanced use of Local Group Policy Editor (gpedit.msc) for defining and applying local security criteria, device restrictions, and network rules.

Policy Configuration — Creation and enforcement of disk, device, and network policies for endpoint protection and compliance.

Windows Administration — Installation and advanced configuration of Windows 10/11 Enterprise, including performance optimization and system diagnostics.

System Services Optimization — Management of system services, startup behavior, and background processes for resource efficiency.

System Imaging & Deployment — Creation and deployment of system images with Acronis, including bootable installation media creation via Rufus for full OS restoration.

PowerShell Scripting — Execution of administrative commands for user, network, and service management through PowerShell.

DISM (Deployment Image Servicing and Management) — Utilization of DISM for image servicing, driver integration, and pre-deployment maintenance.

Disk Encryption Solutions — Implementation and rollout of disk encryption strategies with VeraCrypt and BitLocker, including key recovery management and endpoint compliance.

Virtualization — Familiarity with VMware Workstation Pro for testing environments, OS replication, and snapshot management.

Data Sanitization — Understanding of traditional overwrite limitations and application of advanced sanitization techniques using Parted Magic for secure data destruction.

Interdisciplinary Research — Independent study of formal logic and artificial intelligence, focused on the development of a predictive and ethical evaluation framework (AI governance aligned with EU AI Act principles).

### Ongoing Development:

Advanced Linux Administration — Currently expanding expertise across CentOS 7–9 Stream, Ubuntu Server, and Kali Linux, focusing on user and permission management, process control, service configuration, and CLI-based automation.

Shell Scripting & Automation — Developing Bash scripting routines for system updates, backups, and log analysis; experimenting with PowerShell cross-platform integration to unify tasks between Linux and Windows.

Ethical Hacking Fundamentals — Learning penetration testing and system hardening principles through Kali Linux, exploring tools such as Nmap, Wireshark, and Metasploit for educational and diagnostic purposes.

Virtualization & Cloud Labs — Working within VMware Workstation Pro and VirtualBox to simulate enterprise infrastructures, automate system imaging, and test isolated Linux clusters.

Infrastructure as Code (Introductory Level) — Beginning to study DevOps practices and automation frameworks such as Ansible, Terraform, and Docker, aimed at building reproducible system configurations.

AI & Systems Logic Research — Integrating theoretical research on formal logic, automation ethics, and AI governance frameworks aligned with the EU AI Act into real-world systems analysis.

### Hobbies

Fitness & Dog Training — Regular gym training for physical discipline and focus; enjoy long outdoor walks and play sessions with my dog.

Philosophy & Cognitive Science — Personal research on logic, ethics, and the structure of consciousness; interested in how mathematics and AI intersect with moral reasoning.

### Contacts

Mail: mehdi.benkaouz00@gmail.com web: mehdi.benkaouz.com

Tel: +39 3894679607