



# BENDAHRASS MOHAMMED

**Address:** Rue Bani yaznassen hay najah NR 41 Khemisset  
**Phone:** +212643759170  
**Email:** mohammedbendahrass@gmail.com  
**LinkedIn:** [Mohammed Bendahrass](#)  
**Github :** [MohammedBendahrass](#)

## SUMMARY

I am Mohammed BENDHARRASS, a master's student in IT Security and Big Data at the Faculty of Science and Technology in Tangier. With a strong foundation in information security and data analytics, I am passionate about leveraging cutting-edge technologies to solve complex problems and enhance cybersecurity. Explore my projects and research to see how I apply my skills and knowledge to real-world challenges.

## WORK EXPERIENCE

### Stage de Fin d'étude | Entreprise KIINOV TANGER April 2023 - June 2023

During a period of two months, I completed my internship within KIINOV, where I was active as an IT technician. My main mission was to design and implement a complete web application, intended for the company's customers. This experience offered the opportunity to become concretely familiar with the latest technological advances in development.

## EDUCATION

- Diplômé de DEUST option MATH-INFORMATIQUE-PHYSIQUE-CHIMIE en 2022. 2020-2025 – FST TANGER
- Diplôme LICENCE DES SCIENCES ET THECNIQUE option GENIE INFORMATIQUE en 2023.
- Etudiant à l'instant en MASTER DES SCIENCES ET THECNIQUE option Sécurité IT & Big Data en 2024.
- Diplômé de baccalauréat option science physique a khemisset avec mention bien 2019 – BACALAUREAT

## ACADEMIC PROJECTS

### Integration of MLOps with Signature-based and Image-based Malware Detection Systems

This project involves developing a comprehensive malware detection system that uses both signature-based and image-based techniques to identify malware. The system uses advanced algorithms and machine learning models to analyze and detect malware based on traditional binary signatures and visual patterns derived from image-converted malware binaries. This dual approach improves detection accuracy and provides robust defense against various types of malware.

### Design and implementation of a smart urban waste management system based on IoT

This scientific project presents a sustainable development model, namely Design and implementation of an intelligent urban waste management system based on IoT, which is opened and closed by an intelligent automatic system and measures the filling rate a trash can (smart trash).

Keywords: smart trash can, Arduino, ultrasonic sensor, SIM800L GSM/GPRS module.

### Real-Time Customer Churn Prediction for Telecom Operators

Developed a real-time web application to predict customer churn for telecom operators using Apache Kafka Streams, PySpark, and machine learning models.

### Cybersecurity Lab Project – Proxmox Virtual Environment

- Designed and deployed a virtual cybersecurity lab using Proxmox with multiple VLANs and network segmentation via pfSense.
- Configured security tools such as Security Onion, TheHive, Cortex, Nessus, and Wazuh for monitoring, incident response, and vulnerability scanning.
- Managed Dockerized web applications (WebGoat, BWAPP, DVWA) with Portainer and set up a penetration testing environment with Metasploit.
- Integrated Active Directory and Windows 10 in a simulated corporate environment, gaining hands-on experience in network security architecture, vulnerability management, and incident response.

### Penetration Testing with Nessus

- Penetration Testing with Nessus
- Conducted advanced vulnerability assessments on Metasploitable 2 and Windows Server 2022 using Nessus.
- Identified critical security vulnerabilities through comprehensive scans, leading to detailed reports with actionable remediation steps.
- Calculated CVSS Vectors to prioritize vulnerabilities based on severity and risk.
- Provided solutions to mitigate risks and improve the overall security posture of the systems.

## KEY SKILLS :

- Virtualization: ESXI, Proxmox, Portainer, pfSense
- Security Tools: Nessus, CALDERA, Wazuh, Security Onion
- Networking: VLANs, Firewall Management, Network Segmentation
- Penetration Testing & Web App Security: DVWA, Metasploit,, OWASP, Burp Suite, OpenVas, Nmap
- Operating Systems: Windows, Linux
- DevOps: Docker, Kubernetes
- Base de Données: MySQL, SQL Server, MongoDB
- Git, Github, Gitlab
- AI: Machine Learning, Deep Learning
- Frontend : Angular - Python - C - C++ - Ruby
- Backend : Java POO/ Spring (Boot, Data, Security)/ MicroServices

## ADDITIONAL INFORMATION

- Languages:** English, Français, Arabe.
- Certifications:** Cisco Ethical Hacker, IBM CyberSecurity Fundamentals, Google Play It Safe: Manage Security Risks