

# LBIEL BILAL

Engineering Student in Software Development & Cybersecurity

✉ lbielbilal@gmail.com

📞 +212 6 30 38 75 09

🌐 github.com/b114l-sec

📍 Fès, Morocco

## PROFILE

Currently in the 2nd year of an engineering cycle, I am passionate about defensive cybersecurity, artificial intelligence, and software development. I design "Production-Ready" security solutions (Full-Stack Python/JS), ranging from low-level architecture (cryptographic protocols) to modern interfaces. I am actively seeking an internship to leverage my expertise in IDS, ML, and cryptography.

## TECHNICAL SKILLS

- **Security & Defense:** IDS/IPS, ELK Stack, Honeypots, Malware Analysis, Nmap, SOC operations.
- **Cryptography:** AES-256-GCM, PKI, Key Derivation (PBKDF2), VPN Protocols.
- **Machine Learning:** Scikit-learn, XGBoost, TensorFlow, Anomaly Detection.
- **Development:** Python (Advanced), JavaScript, C/C++, Flask, REST APIs, PyQt/Tkinter.
- **DevOps & Tools:** Docker, Git/GitHub, Linux Administration, SQL, CI/CD pipelines.

## EDUCATION

<b>State Engineering Degree (Computer Engineering)</b> <i>National School of Applied Sciences (ENSA), Fès</i>	2023 – Present <i>Ongoing (2nd Year)</i>
--	---

- Specialization: Software Development, Advanced Networking, Information Systems Security.

## KEY PROJECTS

<b>User-Space Mini-VPN (Custom Crypto Architecture)</b>	<i>System Security</i>
<ul style="list-style-type: none"><li>• Designed a complete VPN protocol inspired by WireGuard (Secure Handshake).</li><li>• Implemented AES-256-GCM authenticated encryption with anti-replay protection.</li><li>• Developed a robust client/server architecture (UDP) managing multiple sessions.</li><li>• Built a modern GUI (Tkinter) with user authentication features.</li></ul>	
<b>Behavioral Detection System (ML-Based)</b>	<i>AI for Cybersecurity</i>
<ul style="list-style-type: none"><li>• Real-time detection engine for Ransomware and Keyloggers using Machine Learning.</li><li>• Developed a full pipeline: Log collection and advanced feature engineering (50+ features).</li><li>• Achieved &gt;95% accuracy in detecting Zero-Day threats.</li><li>• Containerized deployment (Docker) with a monitoring dashboard (Streamlit).</li></ul>	
<b>Advanced Network Scanner with GUI</b>	<i>Open Source Tool</i>
<ul style="list-style-type: none"><li>• Developed a network audit solution integrating Nmap engines (-sS, -sV, -O).</li><li>• Optimized UX/UI for managing large-scale networks (&gt;1000 hosts).</li><li>• Features: Automated reporting (PDF/JSON), alerting systems, and scan history.</li></ul>	
<b>Distributed Defense Infrastructure</b>	<i>Security Lab</i>
<ul style="list-style-type: none"><li>• Multi-protocol "Deception" architecture (SSH, HTTP, FTP) to capture attack vectors.</li><li>• Centralized logging via ELK Stack (Elasticsearch, Logstash, Kibana) for threat analysis.</li></ul>	

## CERTIFICATIONS & SELF-TRAINING

- **Linux:** Mastering Linux Complete Guide (Udemy) - System Administration.
- **Networking:** Cisco Introduction to Cybersecurity.
- **Databases:** Oracle SQL Data Modeling.

## LEADERSHIP & LANGUAGES

### SECOPS Club (ENSA Fès) - Tech Lead

- Organized CTF (Capture The Flag) competitions and live technical workshops.
- Active member of the Student Union (ADEI).

**Languages:** French (Fluent), English (Technical/Professional), Arabic (Native).