Cezar Pedroso

Oskaloosa, IA | 641-931-0461 | cezarapedroso@gmail.com | **GitHub** | **Portfolio** | **LinkedIn**

Education

William Penn University   Oskaloosa, IA | Jan 2023 – Dec 2026
- **B.S. in Software Engineering, Minor in Information Technology** — GPA: 3.5/4.0

Experience

Jeremy Empie Web Design LLC (Intern) Oskaloosa, IA | May 2025 – Jul 2025

- Installed, configured, and optimized office infrastructure including **switches, routers, and networking equipment**
- Developed and deployed **7 responsive websites** using **HTML/CSS, JavaScript, and PHP**
- Managed backend infrastructure via **cPanel**, administering **MySQL databases, domain/DNS configurations, file structures, and security plugins**

William Penn University (Lab Assistant) Oskaloosa, IA | Sep 2023 – Present
- Assisted **60+ students** with technical issues, including hardware, software, and programming issues
- Mentored students on final-year projects and maintained lab computers for security and functionality

Projects

Vulnerability Scanner & Automated Exploitation Tool (Python)
- Developed an automated vulnerability scanner integrating **Nmap** and **Metasploit** for **CVE detection and exploitation** with **90% accuracy** in test environments
- Created a dynamic **PDF reporting system** with risk assessments, exploit summaries, and session logging for penetration testing documentation
- Automated exploit execution via Metasploit RC scripts, **reducing manual testing time by 40%,** and created a **modular JSON CVE database**

Encrypted File Vault (C#)
- Designed and implemented a secure **AES-256-GCM encryption** system ensuring confidentiality and integrity of stored files
- Integrated **Argon2** password-based key derivation to defend against brute-force attacks
- Developed encrypted metadata storage and secure deletion features to prevent data recovery

Reverse Proxy Gateway YARP (.NET 8, C#)
- Built a **production-ready reverse proxy**, implementing load balancing, route transformations, and a catch-all fallback system
- Developed mock **API services** to demonstrate routing and load distribution
- Packaged as a multi-project **.NET 8** solution with container-ready architecture for deployment scalability and deployed multiple demo backend services to **AWS EC2**

Technologies & Skills
- Programming & Scripting: C#, Python, C++, JavaScript, HTML/CSS, Bash, PowerShell
- Databases & Tools: SQLite, PostgreSQL, MongoDB, JSON, Git/GitHub, Unity, Docker, AWS, Azure
- Networking & Systems: Linux Administration, Routing & Switching, Active Directory
- Languages: English (Fluent), Portuguese (Fluent), Spanish (Advanced)