# Gustavo Widman

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## EDUCATION

**INTELI - Institute of Technology and Leadership**                                      São Paulo, SP
*Bachelor of Computer Engineering*                                                     Expected Dec 2026
- Focus on Project Based Learning (PBL) with real-world corporate partners.
- Leadership: President of EchoSec (Cybersecurity League).

## TECHNICAL SKILLS

- **Languages:** Rust (Advanced), Go, C/C++, Python, TypeScript, SQL, Assembly (x86).
- **Infrastructure & DevOps:** Nix/NixOS, Docker, Kubernetes, GitHub Actions, WireGuard, Linux Hardening.
- **Security:** Network Penetration Testing, Red Teaming, ISO 27001 Compliance, Reverse Engineering.
- **Tools & Libs:** Git, Neovim, Postgres, SQLite, Rayon (Rust), Serenity (Rust), Actix/Axum.

## PROFESSIONAL EXPERIENCE

**CamelSec**                                                                                 Remote
*Chief Technology Officer (CTO)*                                                        Apr 2025 – Present
- Architected a fully reproducible infrastructure using **NixOS**, reducing deployment drift to near-zero.
- Designed secure internal networks using **WireGuard** and redundant staging environments for client data isolation.
- Lead Pentesting and Red Team operations, identifying critical vulnerabilities in enterprise client systems.
- Implemented automated compliance checks aligning with ISO 27001 standards.

**EchoSec (Cybersecurity League)**                                                        São Paulo, SP
*President & Counselor*                                                                 Mar 2023 – Present
- Led the university's cybersecurity league, organizing CTF (Capture The Flag) competitions.
- Mentored 20+ members in offensive security, binary exploitation, and Linux fundamentals.

**MW APP IT Consulting**                                                                  São Paulo, SP
*Full Stack Developer*                                                                  Jan 2021 – Apr 2025
- Developed full-stack web applications using **React/TypeScript** and **.NET/C#**.
- Managed MS SQL and MySQL databases for high-traffic clients including CESP and Hunter Douglas.

## KEY PROJECTS

**Based Kernel (Rust, Assembly)**                                                             GitHub
- Developed a bootable x86-64 kernel in Rust (`no_std`). Implemented VGA drivers, interrupt handling (IDT), and memory management from scratch.

**Nix Infrastructure (NixOS, CI/CD)**                                                         GitHub
- Maintained a monorepo managing 5 machines (Cloud/Physical). Configured mail servers, DNS (AdGuard), and mesh VPNs declaratively.

**Zero-Dependency RNN (Rust)**                                                                GitHub
- Built a Recurrent Neural Network from scratch. Outperformed PyTorch in training speed for specific workloads via hand-tuned memory management.

**1 Billion Row Challenge (Rust, HPC)**                                                       GitHub
- Optimized data processing to handle 1B rows in seconds using `mmap` and `Rayon` parallelism, avoiding SIMD overhead.

**Cognitive Chatbot (Rust, LLM)**                                                             GitHub
- Created a discord bot with "Free Will" and RAG memory using Vector DBs to give LLMs long-term context.