

Education

Porto, Portugal **Instituto Superior de Engenharia do Porto (ISEP)** **2025-Present (Expected 2027)**

- Master's Degree in Critical Computer Systems (Mestrado em Engenharia Sistemas Computacionais Críticos)

Porto, Portugal **Instituto Superior de Engenharia do Porto (ISEP)** **2022-2025**

- Bachelor's Degree in Computer Engineering (Licenciatura em Engenharia Informática)

Employment

Porto, Portugal **Sysnovare Innovative Solutions S.A.** **February 2025 - July 2025**

- Deployed containerized applications across development, staging, and production environments
- Documented security comparison between Docker and Podman for enterprise adoption
- Built GitHub Actions workflows for automated container image building and deployment

Professional Development

- Software Quality (ISEP, 2022); Capture-the-Flag Cybersecurity Hackathon (ISEP, 2024)
- Microcontroller Embedded Systems Programming; SQL Bootcamp; Linux System Programming

Technical Skills

- Primary: C; Linux; Git; Shell Scripting; Docker/Podman; CI/CD;
- Secondary: Java; C#; Go; Python; SQL; JavaScript/TypeScript; React; .NET; Node.js; Ansible;
- Exposure: Rust; FreeRTOS; Azure; REST API Design; Kubernetes;

Selected Projects

RVOS (RISC-V FreeRTOS Analysis)

<https://github.com/jpnt/RVOS>

- Analyzed FreeRTOS context switch implementation on RISC-V ISA
- Measured syscall overhead and identified scheduler bottlenecks
- Evaluated FreeRTOS data structure efficiency for embedded systems

Surgical Management Fullstack Project (LAPR5)

<https://github.com/jpnt/surgicalmanagement-back-end>

- Deployed multi-component system to Azure using Ansible and Docker
- Implemented .NET backend with Clean/Onion Architecture and SQL Server/EF Core
- Configured CI/CD pipeline for .NET backend, Node.js backend, and React frontend
- Designed RESTful API with authentication and data validation layers with DDD

Applications File Bot (Parallel File Processing System)

<https://github.com/jpnt/LAPR4-SCOMP>

- Developed multi-process file monitoring system using POSIX signals and pipes
- Implemented parent-child process architecture with configurable worker processes
- Created file distribution system for processing recruitment applications
- Built signal handling for SIGINT termination and inter-process communication