

# Murilo Costa

Recife, PE · murilocosta.dev1@gmail.com · github.com/MuriloCosta29 · linkedin.com/in/murilocosta1 · murilocosta29.github.io

## SUMMARY

---

Computer Science student at CESAR School (2nd semester) focused on backend development and DevOps. Hands-on experience building multi-service systems with Python, FastAPI, PostgreSQL, Redis, Celery, Docker Compose, Prometheus, Grafana, and Nginx. Seeking an internship to apply and expand software engineering skills in a professional environment.

## PROJECTS

---

### Deploy Tracker (completed)

FastAPI, PostgreSQL, Redis, Celery, Prometheus, Grafana, Docker Compose, Nginx, GitHub Actions

- Built a complete deploy monitoring system with 8 services orchestrated via Docker Compose.
- Implemented Redis caching (cache-aside pattern), async workers with Celery for periodic health checks, and metrics collection with Prometheus + Grafana dashboards.
- Set up full CI/CD with GitHub Actions (lint, tests, Docker build) and Nginx as a reverse proxy.
- Entire project built without tutorials — only official documentation. Every line written and understood by me.

### System Monitor (in progress)

C, Linux, /proc filesystem, POSIX system calls, ncurses, systemd, Makefile

- Building a system monitoring tool in C that reads information directly from /proc, /etc/passwd, and Linux system calls.
- Covers processes, signals, users, permissions, CPU, memory, disk, network, logs, systemd, and cron.
- Deployed on a self-hosted Ubuntu Server (homelab), accessed via SSH — no cloud providers, bare metal.

### GTD App

FastAPI, SQLite, SQLAlchemy, Docker

- Built a complete REST API for task management with CRUD operations and automatic /docs documentation.
- Containerized the application with Docker and documented the entire project on a public technical blog.

## SKILLS

---

**Languages:** Python, C, Bash, JavaScript (basic), SQL

**API & Backend:** FastAPI, Django (academic), SQLAlchemy, Pydantic, Celery

**Databases & Cache:** PostgreSQL, Redis, SQLite

**Observability:** Prometheus, Grafana

**Infrastructure & DevOps:** Docker, Docker Compose, Nginx, Linux (Ubuntu Server), Git, GitHub Actions

**Environment:** Neovim (LazyVim), TMUX, Ghostty, SSH, Ubuntu Server (homelab)

**Familiar with:** Jira, Figma

## EDUCATION

---

**CESAR School** — Bachelor's in Computer Science | 2025 – 2029 (expected)

Currently in the 2nd semester. Courses: Fundamentals of Software Development, Imperative and Functional Programming, Human-Computer Interaction, Mathematical Logic for Computing, Project Fundamentals.

## LANGUAGES

---

Portuguese (native) · English (professional — reading, writing, and technical communication)

## ADDITIONAL

---

- Technical blog at [murilocosta29.github.io](https://murilocosta29.github.io) — documentation of each project sprint, written in English.
- Active GitHub profile with conventional commits, feature branches, documented PRs, and a public Kanban board.
- Homelab: self-hosted Ubuntu Server on repurposed hardware for infrastructure and DevOps practice.