

JÚLIO SILVA

Software Engineer

@ julio.m.b.c.silva@gmail.com 📍 Portugal
in julio-miguel-silva 🌐 jmbscs
🌐 https://jmbscs.github.io/portfolio/



Work Experience

Mid Backend Developer

GuestReady / RentalReady

📅 Oct 2024 – Present

📍 Remote

- Contributed to a large-scale **Property Management Software (PMS)** built with **Django**, serving thousands of properties.
- Focused on **backend development** within a team of 40+ developers, with occasional **front-end** contributions.
- Developed and maintained integrations with third-party **APIs** such as **Booking.com**, **Airbnb**, and **Vrbo**.
- Investigated and resolved user-reported bugs, improving system **reliability** and **user satisfaction**.
- Diagnosed production issues using **Sentry** and **Datadog**.
- Executed bulk updates on **PostgreSQL** production databases with minimal downtime.
- Participated in **code reviews**, ensuring **clean code practices** and **team collaboration**.

Software Engineer

Wavecom

📅 Jan 2021 – Oct 2024

📍 Aveiro, Portugal (Hybrid)

- Worked closely with clients to define and develop software features.
- Built microservices using **Python** and **Golang**; implemented **gRPC** and **Protocol Buffers** for inter-service communication.
- Designed and developed **REST APIs** for both **SQL** and **NoSQL** databases.
- Containerized applications using **Docker**; managed services with **Docker Compose**.
- Improved **Grafana** dashboard performance by optimizing database queries.
- Created **ETL pipelines** using **Telegraf** and performed data analysis with **Pandas**.
- Developed a monitoring system for **High-Performance Computing (HPC)** environments using **Grafana**, **VictoriaMetrics**, and **Python**.
- Automated workflows with **Makefiles** and **Bash scripts**.
- Researched emerging technologies and built **Proofs of Concept (PoCs)**.

Education

Master in Electronics/Telecommunications Engineering

University of Aveiro

📅 2014 – 2020

📍 Aveiro, Portugal

Thesis - Recovery and Identification of Moments - Grade: 19/20

- Development of a **Python** automatic image retrieval system capable of associating images to moments described in text

Relevant Links

- BigHPC Project:** <https://bighpc.wavecom.pt/>
- BigHPC Speaker:** <https://www.youtube.com/watch?v=5gaiovo9DD0>
- Thesis Link:** <https://ria.ua.pt/handle/10773/30553>
- Thesis Paper:** https://ceur-ws.org/Vol-2696/paper_91.pdf

Tech Skills

Programming

Python Golang JavaScript

Web

HTML CSS HTMX
REST APIs

Frameworks

Django FastAPI Pydantic
SQLAlchemy Pandas

Databases

PostgreSQL VictoriaMetrics
Redis SQL NoSQL

Monitoring & Logging

Grafana Datadog Sentry
Telegraf

Data Formats

JSON CSV YAML

Others

Docker Git Linux
Shell scripts RabbitMQ

Languages

Portuguese (Native)
English (Fluent)