

# JÚLIO MIGUEL BRAZ DA COSTA SILVA

## Software Engineer

@ julio.m.b.c.silva@gmail.com 🌐 Portugal  
LinkedIn: julio-miguel-silva GitHub: jmbcs  
Portfolio: <https://jmbcs.github.io/portfolio/>



## Work Experience

### Mid Backend Developer

#### GuestReady / RentalReady

📅 Oct 2024 – Present ⚡ Remote

- Worked on a **Property Management Software (PMS)** used by thousands of properties built on **Django**, as part of a team of over 40 developers; contributed primarily to the **backend**, with occasional contributions to the **frontend** as well.
- Built and maintained features integrating with third-party **APIs** like **Booking.com**, **Airbnb**, and **Vrbo**.
- Owned core backend components; improved **performance**, **readability**, and **Maintainability** through refactoring.
- Investigated and resolved user-reported bugs, boosting system reliability and satisfaction.
- Diagnosed production issues using **Sentry** and **Datadog**.
- Performed bulk updates on **PostgreSQL** production databases with minimal downtime.
- Led and participated in **code reviews**, promoting best practices and collaboration.

### Software Engineer

#### Wavecom

📅 Jan 2021 – Oct 2024 ⚡ Aveiro, Portugal (Hybrid)

- Developed features in close collaboration with clients and stakeholders.
- Built microservices in **Python** and **Golang**; used **gRPC** and **Protocol Buffers** for service communication.
- Designed **REST APIs** for **SQL** and **NoSQL** databases.
- Containerized services with **Docker**; managed deployments via **Docker Compose**.
- Optimized queries for faster dashboard loading in **Grafana**.
- Created **ETL pipelines** with **Telegraf**; performed data analysis using **Pandas**.
- Developed a monitoring framework for **High-Performance Computing (HPC)** with **Grafana**, **VictoriaMetrics**, and **Python**.
- Automated tasks with **Makefiles** and **Bash**.
- Researched new 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=5gaivo9DD0>
- Thesis Link:** <https://ria.ua.pt/handle/10773/30553>
- Thesis Paper:** [https://ceur-ws.org/Vol-2696/paper\\_91.pdf](https://ceur-ws.org/Vol-2696/paper_91.pdf)

## Tech Skills

### Programming Languages

Python Golang Javascript

### Web

HTML HTMX CSS

REST APIs

### Databases

PostgreSQL

SQL/NoSQL

VictoriaMetrics

### Data serialization

JSON

CSV YAML

### Python Libraries

FastAPI

Pydantic Django

SQLAlchemy Pandas

### Others

Datadog Sentry

RabbitMQ Redis Git

Telegraf

Linux Shell scripts Grafana

Docker

## Languages

Portuguese (Native)

English (Fluent)