



Rui Casaca

Contact



+351 934994598



rui.casaca@gmail.com



<https://www.linkedin.com/in/rui-casaca/>



Coimbra, Portugal



About me

Professional with solid experience in geographic information systems and a growing career in software development. I value practical innovation, problem-solving, and continuous learning in demanding and collaborative environments.



Professional Distinctions

D. Nuno Álvares Pereira Medal – Merit of the National Republican Guard

The highest distinction awarded by the GNR, recognizing exceptional bravery, dedication, and merit.

Assiduity Medal

Awarded for irreproachable conduct throughout the career.

Military Medal for Exemplary Conduct

Recognition for constant dedication and exemplary service performance.



Languages & Frameworks

- C /C++, C#
- JS/React
- Java
- .NET Core/Maui/Blazor
- GitHub/GitLab
- SQL, SQLite, Postgres



Professional Experience

Analyst, Software Developer & Innovation Specialist

GNR – UEPS (National Republican Guard –

Emergency Protection & Relief Unit)

Jul 2020 - Present

- Development of mobile/desktop software, process automation, and platform management.
- Advanced experience with georeferenced systems such as ArcGIS Pro and QGIS.
- Decision-support in critical situations.
- Participation in missions with international teams.
- Internal trainer and technical event presenter.

Firefighting Operations Technician

GNR – UEPS (National Republican Guard –

Emergency Protection & Relief Unit)

May 2019 - Jul 2020

Patrol Officer

Guarda Nacional Republicana (GNR)

Out 2011 - Mar 2019



Projetos

Missing Persons Search Application

React, Node.js, LLM Integration, RESTful API

Full-stack mission-critical application for automating emergency processes.

- Processes structured data of missing persons.
- Generates dynamic prompts using contextual data.
- Integrates AI APIs (LLMs) for analysis and prediction.
- Produces automated operational reports (PDF) with email distribution.
- Multi-step interface, risk assessment algorithms, real-time dashboard, and behavioral analysis using historical data.

Georeferenced Photo Registration App

Kotlin

Mobile app for capturing photos with watermarks (GPS, direction, compass, date/time, logo), supporting field documentation and instant sharing.

User Tracking & Management App

Kotlin, SQLite

App with login, route logging, basic statistics and export (CSV, JSON, email). Real-time synchronization with Firebase.

Educational Game for Children

Python

Game to encourage study among primary-school children through a simple and intuitive interface, locking the device until all challenges are completed. Admin-panel configurable.

Other Projects

- Inventory application in Kotlin with SQLite.
- Inventory system in Java with PostgreSQL.
- Android monitoring app with state-change alerts and weather conditions, integrated with ArcGIS database APIs.
- Python scripts for process automation.
- Other operational support tools.



Education

Bachelor's in Computer Engineering – Software Development Track

Instituto Superior de Eng. de Coimbra (ISEC)

2023 - Presente