

AFONSO MANATA

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Education

Instituto Superior Técnico

Expected Graduation: May 2027

Bachelor of Computer Science and Engineering

Lisbon, Portugal

- Engineering **GPA: 16.1/20**.
- **Courses:** Algorithms and Data Structures, Networks, Operating Systems, Distributed Systems, Software Engineering, System Design, Object-Oriented Programming, Computer Architecture, Artificial Intelligence, Compilers.

Work Experience

Junitec

February 2025 – Present

Software Engineer

Lisbon, Portugal

- Worked alongside **top engineers** from my university at **Europe's Best Junior Enterprise**, which generated over **€200k in annual revenue** by building solutions for leading enterprises.
- Engineered a **full-stack inventory management** with a **React.js** interface and a **Go** backend, containerizing the entire project with **Docker**, which streamlined operations for a non-profit supporting **40+ abandoned children annually**.
- Developed **real-time** collaboration features using **WebSockets in Go**, reducing manual paperwork by **60%**.
- Wrote backend logic in **Go** for **SQLite integration**, streamlining the management of **20k+ stock items**.

Noesis

July 2025 – September 2025

Software Engineer Intern

Remote

- Built **Python/JavaScript** scripts that generate **adaptable graphs**, eliminating the **costs** of using **external APIs**.
- Increased team **efficiency** by **2+ weeks** per year by building an **N8N workflow** to automate monthly **cybersecurity reports**, which reduced **manual reporting** time, impacting the **productivity** of **15+ cybersecurity engineers**.
- Developed multiple **automation** scripts to make scheduled **queries** to an **ElasticSearch**, which eliminated the need for **manual input** and reduced the number of **queries** by **66.6%**.
- Implemented **multi-threading** in **N8N** reducing **runtime** by **67.2%**.

Extra Curricular

IBM

November 2024 – February 2025

IBM Full-Stack JavaScript Developer Certificate (174 hours)

Remote

- Used **React.js** to create the frontend of a **"Paradise Nursery"** shopping application.
- Developed secure **RESTful APIs** in **Node.js/Express** connected to a **PostgreSQL** database.
- Designed, developed, and deployed **microservices** using **Docker** and **serverless architectures**.

University of Coimbra

November 2023 – July 2024

Participant, T@lentoDEI Program

Coimbra, Portugal

- Built a **Python** system to control a **Tello drone** using **real-time muscle signals**, reducing manual input by **100%**.
- Engineered a custom **boost feature**, increasing drone speed by **50%** on muscle-triggered commands.

Projects

JustAQuote

Spring Boot | GraphQL | PostgreSQL | iOS Shortcut

- Implemented a **GraphQL API** in **Spring Boot**, backed by **PostgreSQL**, to deliver a daily motivational quote.
- Integrated the **API** with an **iOS Shortcut**, enabling seamless access to the daily quote directly from an **iPhone**.

GemSolver | [Source Code](#) | [Demo Video](#)

Node.js | Tesseract.js | Gemini API

- Engineered a screenshot-to-answer tool with **Tesseract.js** and the **Gemini API**, reducing searching time by **75%**.
- Processed **200+ screenshots** in one semester, automating my study workflow and contributing to a **top 1% grade**.

House Price Prediction in Lisbon | [Source Code](#)

Python | Pandas | Scikit-Learn

- Trained a **Machine Learning** model on a Kaggle dataset with **240+ real estate entries**, achieving **70.3% accuracy**.

Technical Skills

Languages: Python, Java, Go/Golang, SQL, TypeScript/JavaScript, N8N, HTML/CSS, C.

Libraries/Frameworks: Spring Boot, Spring Data JPA, PostgreSQL, SQLite, Node.js, React.js.

Developer Tools: AWS, Git, Docker, Postman, Neovim, Unix.

Certifications/Awards: Aws Cloud Essentials, IBM Full-Stack JavaScript Developer, City's Best High School Student.