

Leonardo Colaço

☎ +258 84 554 7368 ✉ leonardocolacogg@gmail.com 🌐 [Portfolio Web Page](#) 🔗 [LinkedIn](#) 🐙 [GitHub Profile](#)

Education

Eastern Mediterranean University

Mar 2021 - Expected Feb 2025

Bachelor of Engineering in Computer Engineering

Famagusta, Cyprus

- **Relevant Coursework:** Data Science, Machine Learning, Software Engineering, Client/Server Programming, Data Structures and Algorithms, Database Management Systems, Security of Computer Systems and Networks

Skills

Languages: Python, Javascript, Rust, Java, C, HTML and CSS, SQL

Technologies: Git, .NET, React.js, React Native, Expo Go, MongoDB, Express.js, Node.js, Linux, Adobe Xd, Figma

Concepts: Frontend Programming, Backend Programming, APIs, Database Management, Systems Programming, System Design, Frameworks, Web Development, Network Security

Spoken Languages: English (Native), Portuguese (Native), German, Turkish

Experience

Next Thing Consulting, Lda

July 2024 - Sept 2024

Software Engineer Intern

Maputo, Mozambique

- Conducted a thorough study to analyze and improve the workflow of a client logistics company, implementing **Robotic Process Automation (RPA)** to automate inventory reconciliation and invoice processing, resulting in increased efficiency and reduced manual processes and errors.
- Developed a **Warehouse Logistics Management App** alongside the RPA, integrated with barcode technology to streamline item registration into and out of the database, reducing use of paper.
- Redesigned the employing company's webpage using **React.js**, incorporating modern design principles and improving user experience, which was well-received for its visual appeal and functionality.

Projects

Leo's NyanChat (Fullstack Web App) | Javascript, MongoDB, Express.js, React.js, Node.js, Tailwind CSS, Socket.io

2024

- Developed a messaging web application with the **MERN tech stack, socket.io, and daisyUI**.
- **React.js** for frontend – **Express.js** for backend – **MongoDB** as the database – **Render** for app deployment.
- Set up user **authentication routes** with an **Express.js** server. The authentication and authorization is handled with **JSON Web Tokens**. **Protected user authentication and message routes** with a middleware.
- **Real-time messaging** was implemented using **socket.io**, displaying **online user status**, as well as **instant messaging**.

Image Processor | Python, OpenCV

2024

- Lead Developer in the development of an **image processor application in Python** for my group's graduation project.
- The capabilities of the image processor are **accepting images in several different formats, content-aware image resizing, converting images to grayscale, and cartoonizing an image**.
- In order to implement these functions, we make use of a few techniques such as **seam carving for content-aware image resizing, image abstraction by structure adaptive filtering, and patch swapping**

Warehouse Logistics Management App | Javascript, React Native, Express, Databases, Robotic Process Automation

2024

- Developed an application to streamline warehouse operations by **scanning merchandise barcodes, verifying items against a database, and organizing them into "pallets"**
- Implemented functionality to name suppliers and **save pallet data with item details to the database**, including a unique pallet identifier.
- Designed a feature to **view and select saved pallets**, displaying all associated items for better inventory management.
- **Created an API** integration to send pallet information to the server as a file, enabling automated invoice document generation.

Lexical Analyzer | Python

2024

- Designed a python program that performs **lexical analysis**.
- It reads in a stream of characters, **identifies** the lexemes in the stream, and **categorizes them into tokens**.