

Leonardo Colaço

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Education

Eastern Mediterranean University

Mar 2021 - Expected Feb 2025

Bachelor of Engineering in Computer Engineering

Famagusta, Cyprus

- **Relevant Coursework:** Artificial Intelligence, High End Embedded Systems, Software Engineering, Client/Server Programming, Computer Architecture, Data Structures and Algorithms, Database Management Systems, Digital Logic Design and Systems, Operating Systems, Computer Networks

Technical Skills

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

Technologies: Git, .NET, React.js, React Native, MongoDB, Express.js, Tailwind CSS, Postman, Node.js, Linux, Adobe Xd, Figma, Photoshop, Sony Vegas

Concepts: Frontend Programming, Backend Programming, APIs, Database Management, Systems Programming, OOP, Operating Systems, Algorithms, Frameworks, Web Development, Network Security, Penetration Testing

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 **Logistics Stock Management application** 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**

Logistics Stock Management | Javascript, React Native, Express.js, Microsoft SQL, and Robotic Process Automation

2024

- Using React Native, I designed a **stock management system** for receiving merchandise in warehouses, as well as selling the merchandise as a delivery person.
- Users are able to scan goods received as well as sold through their barcodes and very easily keep track of the warehouse stock for their merchandise.
- The server for api requests was made through Express, a Node.js library, and I made use of a database created in Microsoft SQL.

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**.

Leo's Pokédex | Javascript, HTML and CSS, RESTful API, JSON

2023

- Designed a web page that fetches stats about a specific Pokémon using **PokeAPI**.
- **The search bar algorithm was designed using Javascript**, displaying results for specified pokemon