AURÉLIO MAGALHÃES

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Github: LeloJNM **LinkedIn:** Aurélio Magalhães

Languages: Portuguese (Native) English (Intermediate)

EXPERIENCE

Embedded Systems & Robotics Instructor (Arduino) - UFPB [João Pessoa - BR] 07/2022 – 01/2024
Delivered lectures and mentored new students in association with IEEE RAS, establishing a robust technical foundation and fostering communication and critical thinking.

Teaching Assistant – Digital Circuits I - UFPB [João Pessoa - BR] 02/2023 – 11/2023
Guided students through the fundamentals of digital circuit concepts, emphasizing logical reasoning and problem solving.

Programming Tutor - FUNETEC [João Pessoa - BR] 06/2024 – 12/2024
Taught coding via code.org in public elementary schools, bolstering computational thinking skills.

Researcher – Rocketry Systems - UFPB [João Pessoa - BR] 12/2024 – Present
Participated in projects validating payload ejection and embedded systems, ensuring component efficacy and safety while refining analytical and teamwork skills.

EDUCATION

B.S in Computer Engineering - Universidade Federal da Paraíba - 7.99/10 02/2022 – 02/2027 (expected)

Technical Degree in Electronics - IFPB - 89.43/100 06/2021

PROJECTS

CRUD Employees (C++, OOP)
Developed a management system for a fictional company implementing create, read, update, and delete operations to reinforce object-oriented principles.

CRUD Database (Python, SQL, OOP)
Engineered a PostgreSQL-integrated project using Python (psycopg) to execute CRUD operations, showcasing practical data manipulation.

Snake.CV (C++, OOP, OpenCV)
Designed and implemented an interactive Snake game using `OpenCV` and object-oriented programming (OOP), enabling real-time user interaction through computer vision techniques.

Residential Property Classifier (Python, scikit-learn)
Implemented machine learning algorithms using `scikit-learn` to classify residential properties based on key features. Leveraged supervised learning methods and conducted model evaluation through accuracy testing, showcasing strong analytical and data-driven decision-making skills.

Visual Data Structures (Python)
Developed an interactive tool using `tkinter` to visualize the behavior of core data structures, including Linked List (LL), Binary Search Tree (BST), Doubly Linked List (DLL), Queue, and Stack.

SKILLS

Programming: C, C++, Python
Concepts: Object-Oriented Programming, SQL
Tools: Github, VSCode, Arduino, Sklearn, PostgreSQL
Methodologies: Agile, SCRUM
Soft Skills: Teamwork, Quick Learner, Flexibility, Collaboration