



SENIOR EMBEDDED ENGINEER / PORTO, PORTUGAL

I build the intelligence inside real products.

From microcontroller firmware to production-ready hardware, I turn complex ideas into dependable embedded systems for marine technology, electric vehicles, IoT and renewable energy.

16+

YEARS IN EMBEDDED SYSTEMS

12

YEARS IN HARDWARE PRODUCT MANUFACTURING

10

YEARS AS A TECH LEAD

github.com/pulsetronics

linkedin.com/in/ayinde-olayiwola-a7753a5a

Engineering across the entire product stack.

I am a hands-on embedded systems engineer and technical leader with experience spanning circuit design, PCB development, low-level firmware, embedded Linux, graphical interfaces and production integration.

My career has taken me from Nigeria to New Delhi and now Portugal. Along the way, I have built technology for open-source education, electric and autonomous vehicles, connected products, smart hospitality and autonomous underwater systems.

MARINE

Autonomous underwater and marine systems

ELECTRIC MOBILITY

Vehicle controls, clusters and motor controllers

IOT

Connected sensing and hospitality products

OPEN SOURCE

Hardware platforms and engineering education

Built in the field, not just on paper.

2024 - PRESENT

OCEANSCAN MARINE SYSTEMS & TECHNOLOGY · PORTUGAL

Senior Embedded Engineer

Developing hardware, firmware and software for advanced marine systems, from architecture and PCB development to device integration, validation and manufacturing support.

MARINE / FIRMWARE / PRODUCTION

2023 - 2024

QUANTUM LEAP · PORTUGAL

Head of Hardware Engineering

Led hardware engineering for connected products including smart water monitoring and intelligent tabletop systems for restaurants and hotels.

IOT / LEADERSHIP / PRODUCT

2020 - 2023

EULER MOTORS · INDIA

Senior Embedded Engineer, Architect & Consultant

An early senior embedded engineer working with the founder, executives, software and production teams. Built in-house instrument clusters and a vehicle control unit, led early motor-controller development and architected embedded systems for autonomous delivery vehicles.

EV / AUTONOMOUS / ARCHITECTURE

Leadership, open source and strong foundations.

2017 - 2019

BYTEHUB EMBEDDED · NIGERIA

Co-founder

Co-founded an embedded-systems education company built around practical, open-source learning. CloudX helped students move from rapid prototyping to real embedded development.

OPEN SOURCE / EDUCATION / CLOUDX

2013 - 2016

GEOGLOBE ENERGY TECHNOLOGY · NIGERIA

Embedded Systems Engineer

Designed embedded solutions across firmware, electronics, microcontrollers, hardware integration and system testing.

ENERGY / HARDWARE / FIRMWARE

2010 - 2012

SCITECH ENERGY TECHNOLOGY · NIGERIA

Engineering Intern

Built practical foundations in electronic systems, hardware development, troubleshooting and engineering operations.

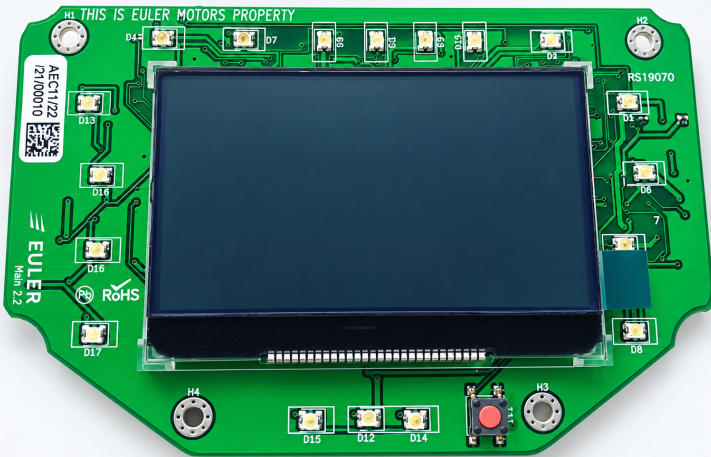
ELECTRONICS / ENERGY

EDUCATION

National Diploma in Computer Engineering

Yaba College of Technology, Lagos · 2013 - 2017

Systems designed to solve real problems.



ELECTRIC MOBILITY

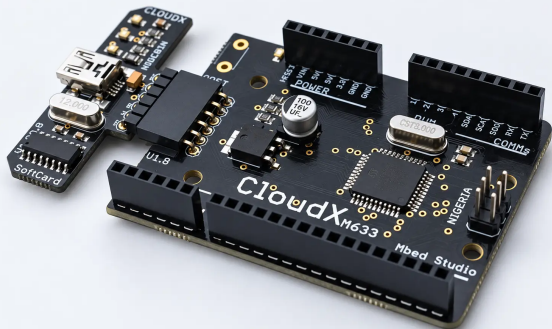
Vehicle electronics platform

Designed and built Euler Motors' first in-house instrument cluster for three-wheel logistics vehicles, alongside production VCU and motor-control systems.

01 / EULER MOTORS

3W instrument cluster

SAFERTOS / CAN / FOTA / KICAD / DSP



02 / OPEN-SOURCE HARDWARE

CloudX Microcontroller

PIC / EMBEDDED C / EDUCATION



03 / HOSPITALITY TECHNOLOGY

Lua smart restaurant service

ESP32-S3 / LVGL / WIRELESS / WEARABLE

Connected products, built for demanding environments.



04 / LOW-POWER IOT

Frostini temperature monitoring system

A low-power remote monitoring system built around the DS18B20 sensor for restaurants and food-service environments, supporting food safety, reduced spoilage and simpler records.

DS18B20 / ESP32-S3 / LOW POWER / IOT



05 / AUTONOMOUS MARINE

LAUV autonomous underwater vehicles

Embedded hardware and software for autonomous underwater systems, integrating communications, sensing, interfaces and production-ready engineering.

LINUX / TELEMETRY / INTEGRATION

From the register level to the production line.

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|----|---------------------------------|---|
| 01 | Firmware & real-time | Assembly language programming, Embedded C/C++, Python, bare metal, FreeRTOS, SAFERTOS, CMSIS-RTOS, ChibiOS, bootloaders, OTA/FOTA and device drivers. |
| 02 | Hardware engineering | Schematics, multilayer PCB design, power electronics, ARM Cortex-M/A, PIC, AVR, STM32, ESP32 and design-for-production. |
| 03 | Embedded Linux & UI | Ubuntu, Buildroot, Yocto, Raspberry Pi, BeagleBone, NVIDIA Jetson, Linux device drivers, Qt/QML and LVGL. |
| 04 | Connectivity & tools | CAN, UART, I2C, SPI, RS-232/485, Ethernet, MQTT, BLE, Wi-Fi, LoRa, KiCad, Altium, Eagle, oscilloscopes and PCAN. |
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Writing for the engineers coming next.

Practical lessons from building embedded products and growing in the profession.

01 Reusable Embedded Software

02 Object-Oriented Embedded Programming in C

03 Embedded Systems: How to Become an Industry Expert

04 7 Ways to Become a Full-Stack Embedded Software Engineer

05 Programming STM32 on Linux

LET'S BUILD SOMETHING DEPENDABLE

Have an embedded product challenge?

microprogrammer@gmail.com

github.com/pulsetronics

linkedin.com/in/ayinde-olayiwola-a7753a5a

olayiwolaayinde.medium.com