Quantum Richardson

Email: quantum.v.rl@gmail.com | GitHub: github.com/MadTech25 | Location: Washington State

Summary

Technician and Maker. I build smart devices, fix circuits, and prototype real-world tech using Raspberry Pi, Arduino, Python, and AI tools. Passionate about hands-on problem-solving and self-directed engineering. Experienced in AmeriCorps fieldwork and project-based builds across security, automation, and interactive electronics.

Top Skills

Python, C/C++, Arduino, Raspberry Pi, GPIO, RFID/NFC, GPS, LED Matrices, TensorFlow Lite, ONNX Runtime, u8g2lib, Circuit repair, soldering, hot air rework, SSH, Linux CLI, systemd services, Project documentation and GitHub workflows

Projects

E-Bike Anti-Theft Security System

Multi-layer smart security system for e-bikes with GPS tracking, motion-triggered alarms, RFID/NFC unlocking, and hidden camera surveillance. Pushes alerts to phone and auto-starts on boot using systemd.

https://github.com/MadTech25/e-bike-security-system

AI Camera Alert System

Raspberry Pi-based object detection system with real-time image classification, LED alerts, and remote push notifications. Fully documented and auto-started with systemd for field deployment.

https://github.com/MadTech25/ai-camera-alert

Arduino Game Console

Handheld game console built using I2C display, state-driven gameplay logic, and u8g2lib graphics. Features input handling, sound effects, and modular code structure.

https://github.com/MadTech25/arduino-game-console

Custom Arduino Nano Board

Custom-assembled Nano-compatible microcontroller with full pin headers, voltage regulator, reset button, and barrel jack. Ready for bootloader flashing and prototyping.

Quantum Richardson

Email: quantum.v.rl@gmail.com | GitHub: github.com/MadTech25 | Location: Washington State

https://github.com/MadTech25/custom-arduino-nano

Experience

AmeriCorps (National Service Member)

Community Support and Tech Integration, 2022 to 2024

Contributed to field programs with a focus on education, logistics, and public service. Developed strong teamwork, resourcefulness, and hands-on technical confidence.

Amazon Flex - Delivery Contractor

Route Logistics and Customer Service, 2017 to 2025

Managed time-sensitive package delivery in dynamic environments. Gained problem-solving, routing, and self-management skills.

Education

Bates Technical College - AAS in Electronic Equipment Service Technician (In Progress)

Self-Taught in Mechatronics, Embedded Systems and AI - Raspberry Pi, Linux, TensorFlow Lite, Arduino, u8g2lib, GPIO control, system automation