Fredrick Ondara

Electrical & Electronic Engineering Student | Web Developer | Research Assistant
Nairobi, Kenya
Email: fredrickondara01@gmail.com
Phone: +254703589175
LinkedIn: http://www.linkedin.com/in/fredrick-ondara-617570339
GitHub: https://github.com/Fredrick-Ondara-Onenga

Professional Summary

A passionate Electrical and Electronic Engineering student with a strong foundation in web development, embedded systems, and automation. Adept at merging creative problem-solving with technical skills to build impactful projects and solutions.

Key Achievements

- Developed a real-time robotics control system using MATLAB and CoppeliaSim.

- Designed Afrifoundry – A resource hub platform for African innovation.

- Built multiple responsive websites integrating modern UI/UX design.

Education

Bachelor of Science in Electrical and Electronic Engineering
Currently pursuing with excellent performance.

High School Certificate
Graduated with distinction in Mathematics, Physics, and Computer Studies.

Certifications

- Fiber Optics Technology (Certified)
- Web Development (Self-taught & Project-Based)

Experience

Research Assistant – University Lab & Independent Projects

- Contributed to robotics, IoT, and automation research.

- Built projects integrating MATLAB and CoppeliaSim simulations.

Featured Projects

Hiwonder Robotics Series

• Worked on xArm1S and LX-225 Servo series to create programmable robotic arm experiments using Arduino and Python.

Line Following Robot

• Designed and coded a smart robot with sensors to navigate tracks and avoid obstacles using embedded logic.

MATLAB-VREP Fusion

• Developed fuzzy logic control for Pioneer P3DX robots using MATLAB integration and Lua scripting.

Technical Skills

Languages: JavaScript, C++, C, HTML/CSS

Tools: Arduino IDE, MATLAB, Git/GitHub, Figma,V-rep, Hiwonder Serial Bus Servo Debugging Assistant.

Frameworks: React, Tailwind CSS

Soft Skills

• Communication

• Time Management

• Problem Solving

• Self-Learning

• Team Collaboration

Awards & Affiliations

- Active Member of IEEE (Student Branch)

- Robotics Team Leader – University Automation Club

Languages

- English (Fluent)

- Swahili (Fluent)

References

Available upon request including referees and certificates