HILDA CHEPKIRUI

Highly motivated and self-driven recent Electronic and Computer Engineering graduate with a keen interest in embedded systems and IoT development, driven by continuous learning and a goal-oriented approach to contribute to advanced technological innovation as we gear towards Industry 4.0.

CONTACT

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- Enterprise Road, Industrial Area

TECHNICAL SKILLS

- Python, C, SQL, C++, MATLAB
- MATLAB and Simulink
- PLC programming and Scada Systems
- PCB design, Circuit analysis
- IoT and Embedded Systems
- Web frameworks: Flask and Frappe Frameworks
- Git Version Control
- IT Support and Troubleshooting

SOFT SKILLS

- Good interpersonal skills
- Effective communication skills
- Adaptability
- Teamwork
- Good problem solving skills
- Continuous Learning

INTERESTS

- AI & Machine Learning
- IoT & Embedded Systems
- Robotics & Autonomous Systems Control
- CI/CD Pipeline
- Docker & Kubernetes

REFERENCE

Mr. Asaph Muhia
Electronic and Computer Engineering Department, JKUAT
Phone: +254723928227

WORK EXPERIENCE

UpeoSoft Limited   MAY 2024 - JULY 2024
Junior Backend Developer Attachee

- Learned and contributed in design and development of database schemas in MariaDB for data storage and retrieval.
- Learned and developed RESTful APIs using Python and tested them using Postman.
- Contributed in the design of Sales Invoices, Print Formats and ProForma invoices.

Centurion Systems Limited   MAY 2023 - JULY 2023
Research and Development Attachee

- Part of the R & D team tasked with development of PLC kits to provide automated solutions to the manufacturing industries in a bid to achieve industry 4.0 using Siemens, Mitsubishi and Beckhoff PLCs.
- Learnt about the PLC communication protocols, Profibus and Asibus, Power protection systems and SCADA systems

Toror Tea Factory   MAY 2022 - JULY 2022
Electrical Workshop Attachee

- Tasked with maintenance of machines, identifying and correcting electrical faults.

EDUCATION

Jomo Kenyatta University of Agriculture and Technology - *B Sc. Electronic and Computer Engineering*
2020 - 2025

Bishop Gatimu Ngandu Girls High School - *High School Diploma*
2016 - 2019

PROJECTS

Smart Home Automation System

The system integrated custom embedded systems, PCB designs, a database infrastructure and a mobile application to enhance high efficiency and streamline home automation by providing real time monitoring and control capabilities.

Autonomous Four-Wheel Robot

This was a task to develop an autonomous robot that was able to avoid obstacles along a path, remotely locate an already decided target, maintain and optimize speed used in navigating the drive circuit and utilize a braking mechanism when the target is met.

Smart Greenhouse

The system integrated various sensors to measure temperature, humidity, soil moisture and light intensity to optimize plant growth. Data was collected via an STM32 microcontroller and stored in InfluxDB database. I designed a smart energy management system using MATLAB to optimize energy usage in the greenhouse and issue system alerts in case of critical deviations.