




 alvynew@gmail.com

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 Nairobi, Kenya

 Warmware Labs

TECHNICAL SKILLS

Programming in:

- C++
- Dart
- Python

IoT System Development using:

- Raspberry Pi
- AVR Atmega chips

Android apps, iOS apps and web development using Flutter.

Database Design and implementation using:

- SQL
- NoSQL (Firebase)

Engineering Simulations and Design using MATLAB.
PCB design and Through Hole components soldering.

INTERESTS



Programming



Internet of Things



Puzzle games



Video games



Cycling

ALVYNE WAMWEA MWANIKI

Electrical Engineering Student

Hard-working, eager-to-learn final-year electrical engineering student. Equipped with experience in the development of IoT devices. Proficient in programming applications for multiple platforms: Windows, Linux, Android and iOS.

EXPERIENCE

Gearbox Kenya Internship

July 2021 - October 2021

- ✓ I programmed the main microcontroller of an IoT-enabled Access Control System.
- ✓ The components connected to the main microcontroller included an RFID scanner, ultrasonic sensor, LCD, 4x4 keypad and Wi-Fi module.
- ✓ A fully-functional prototype of the system was implemented and tested.

Nano-Satellite Platform University of Nairobi (NaSPUoN) development

October 2020 – September 2021

- ✓ NaSPUoN is a CubeSat bench model developed in UoN in partnership with KSA (Kenya Space Agency). KSA offered a grant of KShs 1 million.
- ✓ I was the Electrical team leader.
- ✓ I worked on On-Board Computer and Communications subsystem.
- ✓ I programmed, implemented and tested the satellite communication software as well as Ground station software (Windows form Application).
- ✓ In November 2021, NaSPUoN was ranked best on merit compared to CubeSats from four other Kenyan universities that were also offered a similar grant by KSA.

IEEEExtreme 14.0 and 15.0 Programming competition

October 2020 and October 2021

- ✓ I was a member of team TitanZ(14.0) and NameOfTeam(15.0).
- ✓ In IEEEExtreme 14.0, We finished 1st in Kenya, 33rd in region R8, 119th globally.
- ✓ In IEEEExtreme 15.0, We finished 1st in Kenya, 32nd in region R8, 103rd globally.

Android App Development (Hearts)

April 2020 – October 2020

- ✓ During Covid lockdown, I learnt programming in Flutter for Android and iOS apps from online tutorials.
- ✓ I programmed a hearts game and released it in Google Play Store (Hearts MultiPlayer - Warmware).

COURSES AND TRAINING

Hands-on Education Program for Technical Advancement (HEPTA SAT)

October 2019

EDUCATION

Ongoing: B. Sc. In Electrical and Electronics Engineering

University of Nairobi

2017 – Present

Year: Fifth

KCSE High School Certificate

Strathmore School

2013 – 2016

GPA: 3.97/4.0

Mean Grade: A- (80)

REFEREES

Dr. Raymond Mutugi Kiruki (NaSPUoN Project Manager)

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Mr. Ephantus Ngugi (Gearbox Kenya Internship Supervisor)

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