

# Software Engineer

Nairobi, Kenya 💡

vikiruallan12@gmail.com 🔽

allanvikiru.github.io 🌐

Allan Vikiru 🛅

Allan Vikiru 😯

A graduate software engineer with a career objective of solving problems by conducting informative research and applying effective solutions in Information Technology.

### **Skills**

#### WEB DEVELOPMENT

• HTML5, CSS3, Sass, JavaScript, PHP, MySQL, Node.js, Pug.js, Laravel, WordPress

#### **DATA SCIENCE**

- Python, MATLAB, and Microsoft Power BI
- Techniques: Web Scraping, Data Cleaning and Preparation, Data Visualisation, Regression Modelling

#### **INTERNET-OF-THINGS**

• Arduino, ThingSpeak, Azure IoT and The Things Network

#### **SOFTWARE ENGINEERING**

- Git, GitHub, GitLab, Heroku, Microsoft Azure, Google Cloud Platform
- Techniques: DevOps, System Analysis and Design, Agile & Prototyping Models, Object Oriented Development Methodologies.

#### UI/UX DESIGN & DEVELOPMENT

• Adobe XD, Figma

#### **RESEARCH & TECHNICAL WRITING**

- GitHub, LaTeX
- Techniques: Proposal Writing, System & User Documentation

#### **SOFT SKILLS**

Communication, Collaboration, Logical & Analytical Thinking, Creativity

## **Experience**

MARCH 2022 - PRESENT

# **Graduate Assistant / School of Computing and Engineering Sciences, Strathmore University**

 Providing support to faculty in conducting research and tutorials and for specific courses as assigned.

**JANUARY 2022 - MARCH 2022** 

# IoT Research Lab Intern / @iLabAfrica

• Under the software development team, handling application design as well as analytics for data collected by IoT powered devices.

- Implementing an end-to-end IoT based solution that applies LoRaWAN networking technology.
- Carrying out code reviews and feature development on a web dashboard in Vue.js and Node.js for an ongoing research project.

MAY 2021 - NOVEMBER 2021

# **Corporate IT Systems Assistant / Quantum Facilities Management**

- Part of the IT team tasked with creating and maintaining solutions that support the firm's core business processes.
- Carried out code reviews and SEO tools for the business site that significantly improved the site's navigation experience as well as overall engagement by 70%.
- Designed and built a web application in PHP and JavaScript to handle core marketing records

JUNE 2020 - MAY 2021

## Freelance Web Developer

- Designed, developed, debugged, and maintained various WordPress based applications such as e-commerce platforms, blogs, and business sites.
- Implemented and reviewed custom plugins to carry out various functions on WordPress admin panel.
- Applied techniques in SEO on a project which brought about a 50% increment of site engagement

JANUARY 2020 - MARCH 2020

## Software Developer Intern / Slash Dot Labs

- Part of the frontend development team, tasked with designing, developing, debugging, and documenting Laravel and WordPress applications.
- Carried out code reviews and debugging to revitalise internal domain registration processes
- Served as Team Lead for a project that involved rebuilding ecommerce and retail platforms that serve 100+ customers per month; that resulted in positive end user satisfaction as well as the development team.

FEBRUARY 2019 - NOVEMBER 2019

### Student Fellow, e-Health Unit / @iLabAfrica

- Worked under the system testing and debugging team for a web application built in Laravel and Vue.js
- Implemented code reviews and unit testing that led to an improvement in the general application runtime.

#### **Education**

MARCH 2017 - SEPTEMBER 2021

# **BSc. Informatics and Computer Science / Strathmore University**

Award: First Class Honours

CGPA: 14.52

Activities: Strathmore University IT Students' Association (SUITSA), Writer – Public Relations

Senate, Strathmore University Student Council (2017-2018)

## **Projects**

### **IoT Based Firefighter Health Monitoring System**

- A system developed to assist fire service personnel in determining the chances of firefighters sustaining fireground injuries.
- Includes a wearable device prototype that incorporates Internet-of-Things technology, a cloud-based dashboard for live monitoring and a web application for generating reports and information management.

## **Workshops & Conferences**

JUNE 2021 - JULY 2021

# 6<sup>th</sup> Strathmore International Mathematics Conference / Strathmore University

Co-presented a paper: 'Detecting the Risk of Fireground Injuries using IoT'. A dissemination of the implementation of wearable sensor technology to assist firefighters in determining the risk of sustaining fireground injuries.

JUNE 2021 - JULY 2021

## 17th ICT Conference / Strathmore University

Co-presented a paper titled 'Automated Estate Services Management System' which demonstrated a web-based system that assists residential estate management committees in their operations.

## **Achievements & Awards**

OCTOBER 2021

### Africa IoT and AI Challenge / IEEE & BENYA

Selected among the top ten projects in the Kenyan chapter. Presented a solution that implements Internet of Things technology to assist firefighters in determining the risk of sustaining fireground injuries.

JULY 2019

# **Konica Minolta National University Contest / Express Automation**

Emerged 1<sup>st</sup> Runners Up nationally as part of a team of three; by developing a solution based on augmented reality technology, that sensitises the importance of recycling.

### **Volunteer Activities**

JANUARY 2018 - FEBRUARY 2018

## **Student Volunteer / Gertrude's Children's Hospital**

Assisted patients and hospital staff in various departments such as Outpatient, Laundry & Housekeeping, Radiology and Pharmacy.