Allan Vikiru

Software Engineer

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allanvikiru.github.io

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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

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Experience

MARCH 2022 - PRESENT

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

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

JANUARY 2022 - PRESENT

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

6th 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 1st 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.