Martin Wanjia Wanzetse

SENIOR SOFTWARE ENGINEER

Details

Nairobi
Kenya
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Links

LinkedIn

Wawe Technologies

Skills

Python

JavaScript

Flutter

Linux

Agile Project Management

Languages

English

Swahili

Profile

Experienced Software Developer adept in bringing forth expertise in design, installation, testing and maintenance of software systems. Equipped with a diverse and promising skill-set. Proficient in various platforms, languages, and embedded systems. Experienced with the latest cutting edge development tools and procedures. Able to effectively self-manage during independent projects, as well as collaborate as part of a productive team.

Employment History

Technical Co-founder and Director, Ebikes Africa, Nairobi

MARCH 2023 — PRESENT

As a Co-Founder and Technical Director at eBikes Africa, I hold a leadership role in the company, driving technical excellence and innovation. My primary responsibilities revolve around the development and management of the eBikes Africa web platform, leveraging Next.js and WordPress. This includes integrating essential features such as M-Pesa checkout capabilities to facilitate seamless and secure transactions. Additionally, I spearhead the development of a tracking IoT platform, utilizing Single Board Computers (SBCs) like Raspberry Pi, to enable real-time monitoring and management of our electric bikes.

Key Responsibilities:

1. Web Platform Development:

- Lead the development and maintenance of the eBikes Africa web platform, ensuring its stability, scalability, and optimal performance.
- Utilize Next.js and WordPress to create a feature-rich and user-friendly website, catering to the needs of our customers.
- Implement M-Pesa checkout capabilities to facilitate seamless and secure payment transactions.

1. Integration with GCP:

- Leverage Google Cloud Platform (GCP) to integrate authentication services, ensuring secure access to the eBikes Africa platform.
- Utilize GCP's analytics capabilities to gain valuable insights into user behavior and improve the overall user experience.

1. Tracking IoT Platform Development:

- Spearhead the development of a tracking IoT platform for eBikes, utilizing Single Board Computers (SBCs) like Raspberry Pi.
- Design and implement firmware and software components to enable real-time monitoring, tracking, and remote management of the electric bikes.
- Ensure the IoT platform's reliability, security, and scalability to accommodate the growing fleet of eBikes.

1. Technical Leadership:

- Provide technical direction and guidance to the development team, fostering a culture of innovation, collaboration, and continuous learning.
- Stay updated with the latest industry trends and emerging technologies relevant to the electric bike industry and implement them where applicable.
- Collaborate with cross-functional teams, including marketing, operations, and customer support, to align technical efforts with business objectives.

Technical Co-founder and Director, Cargo Mlangoni, Nairobi

AUGUST 2022 — PRESENT

As the Co-Founder and Technical Director at Cargo Mlangoni, I play a pivotal role in the development and technical leadership of the company. Leveraging my expertise in web development and platform integration, I am responsible for spearheading the development of the Cargo Mlangoni web platform. This includes utilizing Next.js, with a focus on incorporating M-Pesa checkout capabilities, to create a robust and user-friendly web experience. Additionally, I leverage the use of Google Cloud Platform (GCP) for authentication and analytics to ensure seamless operations and data-driven decision-making. Alongside platform development, I am in charge of creating a tracking platform that integrates external APIs from tracking companies, providing real-time shipment updates to our users. In order to ensure optimal performance and scalability, we leverage Django and Flask frameworks for robust backend applications. Furthermore, my responsibilities encompass Linux server-side development and overseeing key technologies such as Redis, Kafka, and load balancing to optimize system performance.

Key Responsibilities:

1. Cargo Mlangoni Web Platform Development:

- Lead the development of the Cargo Mlangoni web platform, utilizing Next.js to ensure a modern and interactive user experience.
- Incorporate M-Pesa checkout capabilities, enabling seamless and secure online transactions for our customers.
- Utilize Google Cloud Platform (GCP) for authentication and analytics, empowering data-driven decision-making and improving user engagement.

1. Tracking Platform Integration:

- Develop a tracking platform integrated with external APIs from tracking companies, providing real-time shipment updates and enhancing transparency for our customers.
- Collaborate with cross-functional teams to ensure seamless integration and reliability of tracking services.

1. Backend Development with Django and Flask:

- Utilize Django and Flask frameworks to develop robust backend applications, ensuring scalability and maintainability.
- Implement RESTful APIs, handle data processing, and create efficient database structures to support platform functionalities.

1. Linux Server-Side Development:

- Oversee Linux server-side development, ensuring smooth operations and optimal performance of the Cargo Mlangoni platform.
- Implement best practices for security, system administration, and performance optimization.

1. Redis, Kafka, and Load Balancing:

- Implement and maintain Redis for caching and enhancing system performance.
- Utilize Kafka for event-driven architecture and seamless data integration.
- Configure and manage load balancing mechanisms to distribute traffic efficiently across the platform.

Project Lead, Amerix Broadband Communications, Nairobi

AUGUST 2022 — APRIL 2023

As a Project Lead at Amerix Broadband, I play a critical role in leading the development of the Amerix Broadband web platform. Leveraging my expertise in Next.js, I am responsible for spearheading the development process to create a robust and user-friendly web experience. The project incorporates PHP Laravel

for backend development, Django for searching and filtering functionalities, and Node.js for the chat application. Additionally, Flutter is utilized to develop a cross-platform mobile application. In addition to my technical responsibilities, I am also in charge of Linux server-side development, ensuring optimal performance and reliability. Furthermore, I am responsible for overseeing key technologies such as Redis, Kafka, and load balancing to optimize system performance. As the Project Lead, I am also accountable for meeting project deadlines and timelines, organizing and chairing meetings, and facilitating effective communication between developers and the product owner.

Key Responsibilities:

1. Amerix Broadband Web Platform Development:

- Lead the development of the Amerix Broadband web platform, utilizing Next.js to ensure a modern and interactive user experience.
- Implement features and functionalities that align with project requirements and user needs.
- Collaborate with cross-functional teams, including frontend and backend developers, to ensure seamless integration and robust development.

1. Backend Development with PHP Laravel and Django:

- Utilize PHP Laravel for backend development, ensuring scalability, security, and optimal performance.
- Implement RESTful APIs, handle data processing, and create efficient database structures.
- Integrate Django for searching and filtering functionalities, enhancing the user experience.

1. Node.js Chat Application Development:

- Develop a chat application using Node.js, facilitating real-time communication between users.
- Implement features such as messaging, notifications, and user authentication.

1. Cross-platform Mobile Application Development with Flutter:

- Utilize Flutter framework to develop a cross-platform mobile application, ensuring compatibility across various devices.
- Collaborate with the mobile development team to implement intuitive user interfaces and seamless user experiences.

1. Linux Server-Side Development:

- Oversee Linux server-side development, ensuring smooth operations and optimal performance of the Amerix Broadband platform.
- Implement best practices for security, system administration, and performance optimization.

1. Redis, Kafka, and Load Balancing:

- Implement and maintain Redis for caching, enhancing system performance and data retrieval.
- Utilize Kafka for event-driven architecture, ensuring seamless data integration and communication.
- Configure and manage load balancing mechanisms to distribute traffic efficiently across the platform.

1. Project Management and Communication:

- Ensure project deadlines and timelines are met by coordinating with the development team and stakeholders.

- Organize and chair meetings to discuss project progress, challenges, and future plans.
- Facilitate effective communication between developers and the product owner, ensuring a clear understanding of requirements and priorities.

IOT Software Engineer, Davis and Shirtliff, Nairobi

OCTOBER 2021 — MAY 2023

As an IOT and Software Engineer at Davis and Shirtliff, I was responsible for the maintenance and optimization of the Idayliff IOT platform. My primary focus was ensuring its smooth operation, maximizing uptime, and implementing necessary changes to enhance its functionality. Additionally, I played a crucial role in developing cross-platform mobile applications using the Ionic platform, further extending the reach and accessibility of our services.

Key Responsibilities:

1. Maintenance and Support:

- Regularly monitor and maintain the Idayliff IOT platform to ensure its reliable operation.
- Identify and troubleshoot any technical issues, promptly resolving them to minimize downtime and enhance user experience.
- Collaborate with the development team to implement bug fixes, patches, and updates, ensuring the platform's stability and security.

1. Website Development:

- Utilize PHP Laravel framework to develop and modify backend functionalities of the Idayliff IOT platform.
- Implement frontend enhancements using HTML, CSS, and JavaScript to improve the website's user interface and overall user experience.
- Collaborate with the design team to ensure the website's visual aesthetics align with the company's brand guidelines.

2. Cross-Platform Mobile Application Development:

- Leverage the Ionic platform to develop mobile applications compatible with multiple operating systems, including iOS and Android.
- Collaborate with the UX/UI team to create intuitive and visually appealing mobile app interfaces.
- Implement necessary features and functionalities to provide seamless user experiences across different devices.

3. Collaboration and Documentation:

- Work closely with the cross-functional teams, including software developers, designers, and project managers, to gather requirements and implement new features.
- Document the software development process, including technical specifications, user guides, and system architecture diagrams.
- Collaborate with team members to ensure effective communication and knowledge sharing within the organization.

Senior Software Engineer, Sandpipper Technologies, Nairobi

FEBRUARY 2021 — PRESENT

As a Senior Software Engineer at Sandpiper Technologies, my primary role was to lead the development of cutting-edge machine learning and AI systems. Using my expertise in Python, TensorFlow, and Keras, I played a pivotal role in creating advanced solutions that leveraged the power of artificial intelligence. I was also responsible for developing web-based and mobile-based AI systems, utilizing Next.js, React.js, and Flutter. Additionally, I occasionally worked on embedded

systems using Single Board Computers (SBCs) like Raspberry Pi and contributed to client pitches to showcase our innovative offerings.

Key Responsibilities:

1. Machine Learning and AI Development:

- Lead the development of machine learning and AI systems, utilizing Python, TensorFlow, and Keras.
- Collaborate with cross-functional teams to gather requirements, design architectures, and implement scalable and robust AI solutions.
- Develop and optimize algorithms and models to improve accuracy, performance, and efficiency of AI systems.

1. Web and Mobile-Based AI Systems:

- Utilize Next.js and React.js to develop web-based AI systems with intuitive user interfaces and seamless user experiences.
- Leverage Flutter framework to create mobile-based AI systems compatible with multiple platforms, ensuring excellent performance and usability.
- Collaborate with UX/UI designers to ensure visually appealing and user-friendly interfaces.

1. Embedded Systems Development:

- Occasionally develop embedded systems using Single Board Computers (SBCs) like Raspberry Pi, integrating AI capabilities into hardware solutions.
- Design and implement firmware and software components for embedded systems, ensuring reliability, stability, and security.

1. Client Pitches and Presentations:

- Participate in client meetings and pitches to showcase the company's AI-based solutions and their potential benefits.
- Effectively communicate technical concepts to non-technical stakeholders, highlighting the value proposition and competitive advantages of our offerings.
- Collaborate with the sales and business development teams to understand client requirements and tailor presentations to address their specific needs.

Founder and Technical Lead, Wawe Technologies, Nairobi
FEBRUARY 2017 — PRESENT

As a Senior Software Engineer at Wawe Technologies, I played a crucial role in the development of cutting-edge machine learning and AI systems. With a strong focus on utilizing Python, TensorFlow, and Keras, I led the implementation of advanced solutions that leveraged the power of artificial intelligence. I was responsible for developing web-based and mobile-based AI systems using Next.js, React.js, Java (for Android development), and Linux server-side development. Additionally, I occasionally worked on embedded systems using Single Board Computers (SBCs) like Raspberry Pi and actively participated in client pitches to showcase our innovative offerings.

Key Responsibilities:

1. Machine Learning and AI Development:

- Lead the development of machine learning and AI systems, utilizing Python, TensorFlow, and Keras.
- Collaborate with cross-functional teams to gather requirements, design architectures, and implement scalable and robust AI solutions.
- Develop and optimize algorithms and models to improve accuracy, performance, and efficiency of AI systems.

1. Web and Mobile-Based AI Systems:

- Utilize Next.js, React.js, and Java to develop web-based and mobile-based AI systems with intuitive user interfaces and seamless user experiences.
- Apply Java for Android development, creating AI-powered applications that leverage the capabilities of mobile devices.
- Collaborate with UX/UI designers to ensure visually appealing and user-friendly interfaces.

1. Linux Server-Side Development:

- Contribute to server-side development using Linux environments, implementing backend functionalities for AI systems.
- Develop RESTful APIs and handle data processing and storage to support AI algorithms and models.

1. Embedded Systems Development:

- Occasionally develop embedded systems using Single Board Computers (SBCs) like Raspberry Pi, integrating AI capabilities into hardware solutions.
- Design and implement firmware and software components for embedded systems, ensuring reliability, stability, and security.

1. Client Pitches and Presentations:

- Participate in client meetings and pitches to showcase the company's AI-based solutions and their potential benefits.
- Effectively communicate technical concepts to non-technical stakeholders, highlighting the value proposition and competitive advantages of our offerings.
- Collaborate with the sales and business development teams to understand client requirements and tailor presentations to address their specific needs.

Education

Electrical and Electronics Engineering, University of Nairobi, Nairobi

FEBRUARY 2014 — SEPTEMBER 2019

Graduated with Honours

Data Science, ALX University, Nairobi

MAY 2023 — PRESENT

References

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