

Ebongue Nkwane Isaac

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Professional Summary

Experienced DevOps engineer with seven years of hands-on expertise utilizing Docker, Python, Terraform, Kubernetes, AWS services, Azure Services, Git, Jenkins, GitLab, and Grafana to optimize and automate development pipelines. Skilled in refining deployment procedures, improving system performance, and cultivating collaborative environments to ensure smooth project delivery. Additionally, proficient in Software and Mobile development, bringing valuable insights into application architecture, performance optimization, and seamless integration of DevOps practices into both mobile and web development workflows.

Skills

- **Cloud Providers:** AWS, Azure, GCP
- **Orchestration Tools:** Kubernetes, Helm
- **Infrastructure as Code:** Terraform, Cloud Formation
- **Azure Resource Manager (ARM)**
- **Configuration Management:** Ansible
- **Containerization:** Docker, Kubernetes, ECS, EKS
- **CI/CD Pipelines:** Jenkins, Code Pipeline, GitLab
- **Azure DevOps Services**
- **Repository:** GitHub, Docker Hub
- **Operating System:** Linux/Ubuntu
- **Web Application Servers:** Nginx, Apache, Tomcat
- **Database Management System:** MySQL, DynamoDB, PostgreSQL
- **Ticketing Tools:** Jira, ServiceNow
- **Azure Kubernetes Service (AKS)**
- **Monitoring Tools:** Prometheus, Grafana, Kibana
- **Azure Networking (Virtual Network, VPN Gateway, ExpressRoute)**
- **Programming languages:** Python, Java, C++,Flutter,React.Js,TailWind Css,Node.Js,Next.Js,
- **Scripting:** Bash, shell script, PowerShell
- **AWS Services:** IAM, EC2, ASG, API Getway, SNS, SQS, VPC, ELB, CloudWatch, S3, RDS, Lambda
- **Security:** IAM, KMS, Security Groups, NACLs
- **Agile Methodologies:** Scrum, Kanban, Lean
- **Soft Skills:** Detail-oriented, reliable, time management, critical thinking, collaboration, communication, adaptability, teamwork, and accountability

Languages

- **English.**
- **French.**

Experience

DevOps Engineer Specialist | Emera Inc - Canada | June 2021 – Present

- Implemented CI/CD pipelines using Jenkins, GitHub, Azure DevOps, and React for front-end deployments, integrating tools like Webpack and Babel for compiling and optimizing web assets.
- Collaborated cross-functionally to design Azure architectures aligned with organizational technology strategy, achieving a 30% enhancement in system scalability, resilience and workflow management.
- Automated infrastructure using Terraform and Ansible, optimizing configuration and management processes, leading to a 25% efficiency boost.
- Utilized Git, Maven, SonarQube, Nexus, Docker, Kubernetes, and Tomcat for monolithic and microservice deployment.
- Applied security best practices on Azure, emphasizing identity and access management, encryption, and compliance.
- Intégration de tests front-end automatisés (Jest, Mocha) dans le pipeline CI/CD pour garantir la qualité du code et la compatibilité des interfaces utilisateur
- Integrated automated front-end tests (Jest, Mocha) into the CI/CD pipeline to ensure code quality and UI compatibility
- Created Python scripts to monitor security and performance metrics on Azure. These scripts automatically detect and flag anomalies, helping maintain high security standards by proactively managing identity, access, and compliance.

Cloud Engineer Specialist | Shopify – Canada | April 2019 – May 2021

- Led the creation of CI/CD pipelines using Azure DevOps, Git, and Azure tools, enhancing deployment processes and operational efficiency.
- Collaborated across departments to design Azure solutions that align with our tech goals, boosting system scalability, resilience, and workflow efficiency by 30%.
- Streamlined infrastructure setup with Azure DevOps, Python, Terraform, Ansible, Netskope, and ZScaler, resulting in a 25% increase in operational efficiency.
- Utilized Azure DevOps, Maven, SonarQube, Docker, Kubernetes, and Tomcat for smooth deployment of both monolithic and microservice applications.
- Integrated Netskope and ZScaler to bolster cloud security, focusing on data protection and threat prevention.
- Implemented stringent security protocols on Azure, emphasizing identity management, encryption, and regulatory compliance with the aid of Microsoft Purview to uphold the highest security standards.

Project Engineer | FoxBox Digital – Chicago, United States | May 2017 – March 2019

Infrastructure as Code (IaC) Implementation for Cloud Migration

Migration of on-premises infrastructure to the Azure cloud using Infrastructure as Code (IaC) principles with tools like Terraform. Automated the provisioning and management of resources, improving scalability and reducing manual errors. Implemented robust security measures and compliance

standards using configuration management tools. Infrastructure blueprints using Terraform to provision and manage Azure resources efficiently. Implemented IaC principles to automate infrastructure deployment, enhancing scalability and reducing manual configuration errors.

Skills use: Terraform, Azure, Ansible, Networking, Security, Scripting

Consulting – Web Developer – (Nov 2022 – Mar 2023)
CIDT – Canada

Design and creation of a web application for Employer and Student Matching in Canada.

- Evaluate the current backend architecture to identify potential improvements or areas of concern.
- Assess the performance, scalability, and security aspects of the backend system.
- Utilize tools like logging frameworks and performance monitoring tools to gather data on system behavior and usage patterns.

- Develop RESTful APIs using Node.js to provide data and functionality to the frontend interfaces.
- Implement authentication and authorization mechanisms to control access to different user roles (reception, administrators, employees, and students).
- Design database schemas and models using technologies like PostgreSQL to store user data, application settings, and other relevant information.
- Develop RESTful APIs using Node.js and Express.js to provide data and functionality to the frontend interfaces.
- Implement authentication and authorization mechanisms to control access to different user roles (reception, administrators, employees, and students).
- Design database schemas and models using technologies like MongoDB to store user data, application settings, and other relevant information.
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- Develop automated tests using frameworks like Jest or Mocha to verify the correctness of backend functionality.
- Write unit tests to validate individual API endpoints and integration tests to verify the interactions between different components.
- Collaborate with QA engineers to create test cases and scenarios covering various user workflows and edge cases.
- Monitor server logs and performance metrics to proactively identify and address potential issues before they impact users.
- Apply patches and updates to the backend infrastructure, including operating system upgrades, database migrations, and security patches.
- Conduct periodic code reviews and refactoring sessions to improve code quality, maintainability, and scalability.
- Implement logging and monitoring solutions to track application usage, detect anomalies, and troubleshoot errors effectively.

Consulting - Mobile & Web Developer – sep 2022 – (Still in)
TheGlobalPass, Stellar – Canada, USA

Design and production of a Canadian Immigration Management web application called **TheGlobalPass**.

Design and creation of an application for sending, receiving money and converting currencies called **Stellar**.

For Stellar:

1. Implementation of Mobile Application Interfaces with Flutter:

- Develop RESTful APIs using backend technologies like Node.js with Express.js or Django with Django REST Framework to provide data and functionality to the mobile app.
- Design database schemas and models to store user data, authentication tokens, and other relevant information using technologies like MongoDB, PostgreSQL, or Firebase Realtime Database.

2. Implementation of User Dashboard and its Interfaces:

- Build backend logic to support user dashboard functionality, including fetching personalized data, managing settings, and handling user interactions.
- Develop API endpoints to serve data to the user dashboard, such as user profiles, activity logs, and notifications.
- Implement business logic to process user requests and update relevant data accordingly.

3. Integration of Mobile App Functionality with APIs:

- Create API endpoints for user authentication, registration, and access control to ensure secure user management.
- Implement token-based authentication (e.g., JWT) to authenticate users and authorize access to protected resources.
- Develop backend services to manage user data, including CRUD operations for user profiles, preferences, and permissions.

4. User Data Management:

- Design and implement backend functionality to handle user data securely, including encryption, data validation, and access controls.
- Develop APIs to manage user data, such as fetching user profiles, updating preferences, and resetting passwords.
- Implement mechanisms for data synchronization and backup to ensure data integrity and availability.

For TheGlobalPass:

1. Responsive Website Design with React.js and Tailwind CSS:

- Develop backend APIs using technologies like Node.js with Express.js or Django with Django REST Framework to serve data to the React.js frontend.
- Design database schemas and models to store website content, user data, and other relevant information using technologies like MongoDB, PostgreSQL, or MySQL.

Implementation of Registration Interfaces and API Integration:

- Create backend endpoints to handle user registration, login, and account management functionalities.
- Integrate third party APIs for features like email verification, social media login, or payment processing.
- Implement backend logic to validate user inputs, manage user sessions, and enforce security measures.

Consulting - Freelance en TI – (08 aug 2022– 12 sep 2022)

QuickDo – Canada

Development of a mobile application (Android & IOS) for remote payment of services.

Conception of User Interfaces with Flutter:

- Develop RESTful APIs using backend technologies like Node.js with Express.js or Django with Django REST Framework to provide data and functionality to the mobile app.
- Design database schemas and models to store user information, transaction data, and other relevant information using technologies like MongoDB, PostgreSQL, or Firebase Real-time Database

Backend Automation for Payment

- Processing: Utilized Python to automate backend processes related to payment transactions, including the setup of checkout sessions and handling of order fulfillment through APIs, which improved transaction speed and reliability.

Data Management and API

- Integration: Developed Python scripts for managing and securing user transaction data, including implementing encryption and data validation within the backend. This ensured compliance with data privacy standards and reduced data management time..

Management of Checkouts:

- Implement backend logic to handle payment processing using payment gateway APIs such as Stripe, PayPal, or Square.

- Develop server-side endpoints to create and manage checkout sessions, process payment transactions, and handle order fulfillment.

Integration of Mobile App Functionality with APIs:

- Build API endpoints to support mobile app functionality, including authentication, user management, and access control.
- Implement OAuth 2.0 or JWT-based authentication mechanisms to secure API endpoints and ensure user data privacy.

- Integrate third-party services and APIs for additional functionalities such as SMS verification, push notifications, or geolocation services.

Authentication and Authorization:

- Develop endpoints for user registration, login, and logout functionalities, allowing users to create accounts and authenticate securely.
- Implement two-factor authentication (2FA) using SMS, email, or authenticator apps to enhance the security of user accounts and transactions.
- Manage user roles and permissions to control access to different features and functionalities within the mobile app.

Participation in Functional Testing:

- Develop automated tests using frameworks like Jest, Mocha, to validate the correctness and reliability of backend APIs.
- Write unit tests to verify the behavior of individual API endpoints and integration tests to test the interactions between different components.
- Collaborate with QA engineers to create test cases and scenarios covering various user workflows and edge cases.

Maintenance and Updates:

- Monitor server logs and performance metrics to identify and address potential issues affecting the reliability and performance of the backend infrastructure.
- Apply patches and updates to the backend systems, including software upgrades, database migrations, and security patches.
- Conduct periodic code reviews and refactoring sessions to improve code quality, maintainability, and scalability.
- Implement logging and monitoring solutions to track API usage, detect anomalies, and troubleshoot errors effectively.

Consulting - Web Developer – (Octobre 2019– Février 2022)

Essen-Ciels – (remote)

Responsibilities: Developing websites for music artists and updating the company's website.

Analysis of the Existing Company Website:

- Evaluate the current website structure, design, and functionality to identify areas for improvement.
- Assess user experience, performance, and accessibility aspects of the existing website.
- Gather feedback from stakeholders and users to understand their needs and preferences

Website Automation and Content Management

- Developed Python scripts to automate data handling and content management tasks, allowing for streamlined updates and efficient content delivery across various artist websites.

Creation of a Dynamic, Responsive, and Attractive Website:

- Develop a new website with modern design principles and responsive layouts to ensure compatibility across various devices and screen sizes.
- Implement dynamic content management systems (CMS) such as WordPress or Drupal to enable easy content updates and management.
- Utilize HTML5, CSS3, and JavaScript to create engaging and interactive user interfaces.

Development of Music Artist Websites using HTML5, CSS3, and jQuery:

- Design and develop custom websites for music artists, incorporating their branding elements, discography, tour dates, and multimedia content.
- Implement responsive design techniques to ensure optimal viewing experience across desktops, tablets, and smartphones.
- Utilize jQuery for enhanced user interactions, such as image sliders, audio players, and

animation effects.

Utilization of Bootstrap Framework for Styling and Forms:

- Leverage Bootstrap framework to streamline the development process and ensure consistency in design across different web pages.
- Customize Bootstrap components and styles to match the branding requirements and aesthetic preferences of the websites.
- Implement responsive forms using Bootstrap's built-in form controls and validation features to enhance user experience.

Maintenance of IT Equipment:

- Provide technical support for hardware and software issues related to website development and maintenance.
- Ensure the proper functioning of computer systems, servers, and network infrastructure used in website development activities.
- Perform routine maintenance tasks such as software updates, hardware upgrades, and troubleshooting to minimize downtime and ensure smooth operation.

Consulting – Software Developer - 06/2018 – 10/2019

SOFTRONIC (remote)

Responsibility: Design and development of a property management application for both long and short-term furnished rentals using .NET.

Analysis and Design of the Project using UML:

- Conduct thorough analysis of requirements and stakeholders' needs.
- Utilize Unified Modeling Language (UML) to create detailed diagrams such as use case diagrams, class diagrams, and sequence diagrams to model the system's structure and behavior.

Definition of Requirements Specifications:

- Define a comprehensive requirements specification document based on the analysis findings.
- Specify functional and non-functional requirements, including features, user interfaces, performance criteria, and security considerations.

Development of the Application in C# on Microsoft Visual Studio:

- Utilize the .NET framework and C# programming language to develop the application's backend logic and business logic.
- Design and implement user interfaces using Windows Presentation Foundation (WPF) or ASP.NET depending on the requirements for desktop or web-based application.
- Implement data access layer using Entity Framework or other ORM (Object-Relational Mapping) frameworks to interact with the database.

Installation of the Windows Application at Client Site:

- Prepare the application for deployment and create an installer package using tools like Visual Studio Installer or ClickOnce deployment.
- Install and configure the application on the client's Windows environment, ensuring compatibility and proper functioning.

Training on Application Usage:

- Conduct training sessions for the client's staff on how to use the application effectively.
- Provide comprehensive documentation, user manuals, and tutorials to support users in navigating the application's features and functionalities.
- Address any questions or concerns raised during the training sessions and offer ongoing support as needed.

Certifications

- **AWS Certified DevOps Engineer – Professional**
- **Microsoft Certified: Azure Security Engineer Associate**

Education

- Bachelor in Buea University