# **DERRICK SIAYOR**

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#### **SOFTWARE ENGINEER**

#### **SUMMARY**

Skilled software developer with more than 8 years' professional experience in the full stack development of a variety of software applications, including, projects for SaaS, ERP, E-Commerce, E-Learning, and Fundraising. History of successfully implementing and delivering front-end interfaces, back-end modules, RESTful web services and optimized databases. Adapts well with people and situations, with years of experience working across multinational teams, including experience leading the design, architecture, and development of software systems.

### **AREAS OF EXPERTISE**

Agile Methodologies • RESTful Webservices • Database Design • Microservices • Design Patterns • Framework Design & Development • Data Structures & Algorithms • API Development/Integration • OOP • SDLC • SQL/MySQL/Postgres • NoSQL/MongoDB • HTML5 • CSS3 • Front-End Development • Back-End Development • PHP • Core Java • JavaScript • TypeScript • ES6 • Nodejs • ExpressJs • VB.NET • Web Applications • Spring Boot • Laravel/Inertia/Livewire • Android/Kotlin • Angular • VueJs • WordPress • Ionic • AWS • Automated Testing / PHP Units | JUnits | Jest

**Tools:** Git, GitHub, GitLab, Bitbucket, VS Code, Git Bash, PuTTY, Postman, Figma, JWT, OAuth2, Spring Cloud ActiveMQ/RabbitMQ/Apache Kafka, Eureka ELK Stack (Logstash, Elasticsearch, Kibana), Asana, Jira, IntelliJ (Including PHPStorm and WebStorm), Eclipse, Docker, Kubernetes, Terraform, Jenkins, Mapping/Mapbox/Google Map API **Platforms:** Windows, Linux/Ubuntu, AWS (IAM, EC2, S3, SNS, EBS, Lambda, CloudFront, CloudWatch, SQS, Elastic Beanstalk, etc.)

**Design Patterns:** MVC, Creational Patterns (Singleton, Factory Method, Abstract Factory, Template Method), Structural (Adapter, Decorator, Proxy, Facade), Behavioral Pattern (Strategy, Iterator, Observer, State, Mediator), Repository Pattern/Laravel, Framework Design and Development

**Software Architecture:** Domain Driven Design, Web Services (RESTful & SOAP), Service Oriented Architecture, Microservices, Event Driven Architecture, Serverless, CQRS Pattern (Command Query Responsibility Segregation)

### PROFESSIONAL EXPERIENCE

### MATRIX DESIGNS, Accra, Ghana • Aug 2021 - Present

Software engineering consulting agency

### **Software Engineer**

Software engineer for a full-featured, multi-purpose membership management solution with bulk SMS messaging and financial management functionality.

- Provided insight and reporting into the internal workings of the system, including users' behaviors and activities within
  the system, by building activity management module using PHP, Laravel, and MySQL for API, JavaScript/Typescript
  and Angular for frontend.
- Increased and improved user engagement as well as users' experience by building in-app notifications module using application stack including **SSE** (**Server Sent Events**).
- Supported users' onboarding and users' administrative processes by building user management module, and reporting module.

Software engineer for a multi-tenant application providing marketing and sales for SMEs.

- Increased daily users accounts creation by 35% via the integration of WhatsApp Cloud API to onboard news users & store owners/businesses. Implementation done using PHP, Laravel, MySQL, JavaScript, Vuejs and MySQL.
- Improved user experiences across multiple platforms: WhatsApp, Web, & Mobile by implementing Figma UI/UX designs using PHP, JavaScript, Laravel, Vuejs, MySQL, Android/Kotlin, WhatsApp Cloud API, HTML, CSS, Bootstrap, and Facebook Shop API
- Increased products **sales by 40**% by giving users the additional option to browse, order and pay for products all via WhatsApp, **by integrating Facebook Shop API and Payment API Service**.

### World Bank - International Bank of Construction, Washington, DC • Jan 2022 - Jul 2022

Financial Institution

### **E-Learning Solution Consultant**

Implemented an e-learning platform for Uzbekistan using Moodle.

- Coordinated with Design team and other stakeholders, and implemented Moodle E-Learning platform, both web and mobile, that onboarded and trained 700k+ parents and teachers in Uzbekistan, using PHP, CSS, HTML, MySQL, iSpring, and Linux Administration.
- Designed user manual, facilitated platform training, and provided support and maintenance of platform.

## THE COBALT PARTNERS, Accra, Ghana • Oct 2019 - Jul 2021

Software engineering consulting agency

# Senior Software Developer & Project Lead

Coordinated 10-person team during development of e-learning applications based on client specifications.

- Led the design, architecture and the development of software systems following modern engineering practices, using *PHP, Laravel, JavaScript. Vuejs, Ionic, Moodle, Firebase, HTML, SSE, CSS, Bootstrap & Tailwindcss.*
- Gathered and analyzed requirements, created user stories from requirements, and managed the lifecycle of user stories assigned to team members.
- Built up team members' skills/ knowledge in, QA practices, engineering, and design patterns.
- Decreased development time by implementing Laravel base API package for CRUD (Create, Read, Update, Delete) and Search operations.
- Lead the design, development, deployment, and scaling of an EduTech progressive web application (*PWA*) by leveraging the services *of GCP Firebase and Vueis*.

# MATRIX DESIGNS, Accra, Ghana • Jan 2019 - Sep 2019

Software engineering consulting agency

#### **Software Developer**

Full-Stack software developer for a SaaS University Management System, used by both public and private universities in Ghana.

- Developed complex finance module and reporting module using PHP, Laravel and MySQL for API, TypeScript and Angular for frontend, ensuring high accuracy and optimized performance.
- Researched and repaired bugs through testing and troubleshooting.

# Kaya Move, Accra, Ghana • Jan 2017 - Dec 2019.

Software engineering consulting agency

### **Software Developer & Co-Founder**

• Led the design, architecture and the development of software systems following modern engineering practices, using PHP, Laravel, CakePHP, JavaScript, AngularJS, ReactJs, jQuery, MySQL, HTML, CSS, & Bootstrap.

### ICT Plus, Accra, Ghana • Jul 2015 - Dec 2016.

Software engineering consulting agency

### **Software Developer**

- Customized and setup Odoo ERP for clients using Odoo, Python, JavaScript, HTML, CSS, & Bootstrap.
- Developed Custom applications using VB.NET.

# Maharishi International University, Fairfield, Iowa, USA, • Nov 2022 - Present

Providing practical training in computer science for software professionals.

## **Academic Projects**

- Library Management System: Led and coordinated project development of a software system to track books, users, and checkout records. Implemented data access and storage, login and authorization, and book checkout components. Used Java and Swing.
- Quiz App: Developed an Android mobile app in Kotlin which helps students on campus prepare for quizzes and exams.
- Apartment Management System: Developed an apartment management system using Nodejs and Mongo DB.
- Framework Design and Development: Lead the design and development of framework for the financial services (Banks and Credit Card Companies). Framework implementation in Java.

### **EDUCATION**

# Master of Science in Computer Science (Software Engineering)

Maharishi International University – Fairfield, Iowa Nov 2022 – June 2025

Key Courses: Fundamental Programming Practices/Java Basics; Modern Programming Practices/Advance Java;
Algorithms Design & Analysis; Server-Side Programming/NodeJs & MongoDB; Mobile Device Programming/Android with
Kotlin; Advance Software Development/Design Patterns & Framework Design and Development; Software
Architecture/Domain Driven Design, Webservices (RESTFul & SOAP), Service Oriented Architecture, Microservices,
Event Driven Architecture; Cloud Technologies/AWS

Bachelor of Science in Computer Science
University of Cape Coast – Cape Coast, Ghana
Aug 2010 – Sept 2014