TONY OTIM

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PYTHON BACKEND DEVELOPER

Software Engineer with 7 years of experience building scalable systems for Banking and NGOs, delivering solutions such as Agent Banking, UNICEF health apps, and Oxfam budgeting tools. I am proficient in Python (Django, Flask), Java (SpringBoot), AWS, IBM DataPower, PostgreSQL, MSSQL, and DevOps tools (Ansible, Terraform, Kubernetes, SonarQube). Strong in end-to-end development, team collaboration, and delivering reliable, user-centric, cloud-native solutions.

● Software Development Life Cycle ● Web Services ● Microservices Design Patterns ● UI/UX ● Database Design
● AWS Cloud ● Kafka Messaging ● DevOps ● CI/CD ● Containerization

Languages: Python, JavaScript
Web: HTML5, CSS3, ReactJS, Django, Flask
Web Services: RESTAPI, SOAP, GRAPHQL
Web/App Servers: Apache, TomCat, Nginx
Frameworks: Django, Flask
Databases: MSSQL, MYSQL, POSTGRES
Design Patterns: Singleton Pattern, Factory Pattern, Decorator Pattern
SDLC: Agile, Waterfall
Tools: IBM DataPower, Kubernetes, Jenkins, Ansible, Terraform, SonarQube, Kafka, GitHub, Jira, Slack, Confluence
Platforms: MacOS, Windows, Linux

PROFESSIONAL EXPERIENCE

*CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).*

STANBIC BANK - UGANDA, Kampala, Uganda ● 01/2021 – 10/2024
Stanbic Bank Uganda (a subsidiary of Standard Bank Group, Africa's Largest Bank) servers over 1 million customers in Uganda.

Applications Developer
Design, code, test, debug, deploy and correct programs in development environments.
- Automated banking operations with Python scripts, reducing manual tasks, and strengthened security by integrating IBM DataPower for secure messaging, policy enforcement, and advanced threat protection.
- Developed cash withdrawal and lending features using flask reducing dependency on physical branches.
- Developed a real time document tracking system with Django, Celery, PostgreSQL, and React, enabling real-time updates and reducing in-person visits by 20%
- Designed an API service in Flask to allow customers to provide feedback on services and satisfaction.
- Built a KYC tool in Django and Postgres improving risk analysis accuracy and maintaining regulatory compliance.
- Led cloud infrastructure migration from on-prem to AWS implementing DevOps principles and CI/CD pipelines, using Ansible, Jenkins, and Docker for automation and Kubernetes for orchestrating.
- Integrated 15 different service provider applications using Python and Java, leveraging RESTful APIs and SOAP services, which boosted Agent Banking transactions by 35% and significantly expanded service availability.

Technologies Used: *Python, Java, Django, Flask, AWS, JavaScript, Kubernetes, Docker, Postgres DB, MySQL, MSSQL, IBM DataPower, Jenkins, Ansible, RestAPI, SOAP.*

MAKANIKA DOT COM (U) LTD, Kampala, Uganda ● 03/2020 – 01/2021
A Ugandan platform connecting vehicle owners with mechanics, garages, insurance, fuel, loans, and spare parts services.

Lead Developer
Development, design, testing, debugging and deployment of the Makanika Dashboard, Mobile Applications and website
- Developed cross-platform mobile applications using React Native, reducing time-to-market by 50% and ensuring consistent UX across iOS and Android platforms.
- Built secure Django REST APIs with PostgreSQL backend, improving backend reliability by 50% and enabling efficient client-server communication.
- Designed modular architectures and created wireframes in Figma, improving maintainability and reducing UI rework.

Technologies Used: *JavaScript, HTML5, CSS3, Django, Python, React Native, Docker, Figma, Postgres.*

CIVSOURCE AFRICA, Kampala, Uganda ● 02/2019 – 08/2019 (Contract)
CivSource Africa partners with donors and philanthropists to aid development initiatives across Africa. The organization has supported over 68 partners to foster impactful change across Africa.

Software Developer
Development and design of the Grant Management System.
- Led end-to-end development of a Grant Management System with Django and PostgreSQL, boosting efficiency by 50%.
- Managed CI/CD pipelines with GitHub Actions and Docker, ensuring 99.9% uptime, seamless updates, and scalability.
- Architected scalable backend with modular design and created Figma prototypes, enabling faster feedback and reducing development time.

Technologies Used: *Python, Django, Postgres, GitActions, Docker, AWS.*

GOODCITIZEN CO. LTD, Kampala, Uganda ● 01/2018 – 01/2019
An IT Services and software development firm engaged in building integrated software and IT services solutions.

Software Engineer
Developed mTracPro, a weekly epidemiological surveillance system used by UNICEF and Uganda's Ministry of Health.
- Developed core features for a healthcare data collection app in Java, improving reporting efficiency by 50% in rural clinics.
- Designed and prototyped UI workflows with JustinMind, improving user task completion rates in usability testing.
- Supported backend services with WebPy and integrated RapidPro workflows, ensuring reliable message delivery and form submission.
- Led system integration and UAT, achieving 80% defect-free at launch and ensuring smooth health worker rollout.

Technologies Used: *Java, Android Studio, Python WebPy, Rapid Pro.*

OXFAM NOVIB, THE HAGUE, Kampala, Uganda ● 07/2017 – 06/2019
Part of a global confederation working in over 90 countries to fight poverty, support crisis recovery, and empower communities through advocacy and innovation.

Application Developer
Led software developers at Oxfam Data Labs. Developed and designed a household budget tracking app called CashTime.
- Developed an Android budget tracking app using Java and Parse Server, enabling farmers to efficiently manage and monitor agricultural finances.
- Created wireframes and prototypes with JustinMind, cutting redesign cycles by 30% through early feedback.
- Collaborated on Agile sprints for requirements gathering, authored documentation, and led trainings

Technologies Used: *Java, Android Studio, Parse Server.*

ACADEMIC PROJECTS

Maharishi International University (2025)
- **Movie Rental System:** Developed a web platform enabling users to rent movies individually without subscriptions, offering a flexible alternative to DVDs and costly streaming plans. Focused on a smooth, user-friendly experience using Java, Spring Boot, ReactJS, Postgres, and Kafka.

- **AI Powered Micro Blogging System:** Developed a secure, scalable Spring Boot platform with JWT authentication, role-based access, PostgreSQL, Hibernate, and Kafka. Integrated OpenAI GPT via Spring AI for automated content summarization and contextual commenting to boost user engagement.

EDUCATION

Master of Science in Computer Science
(In progress via distance education; expected completion 06/2027)
Maharishi International University, Fairfield, Iowa
Key Courses: Algorithms, Enterprise Architecture, Cloud Computing, Software Engineering

Bachelor of Science in Computer Engineering
Makerere University, Kampala, Uganda (08/2016)

CERTIFICATIONS

Microsoft Certified: Azure Fundamentals (06/2022)