

PROFESSIONAL SUMMARY

Software professional with 2+ years of experience in building scalable, highly available fintech and backend systems. Specialized in designing high-availability systems and RESTful APIs that process millions of financial transactions. Proven track record of maintaining 99.999% system uptime, reducing security incidents, and improving operational efficiency through robust architecture design and modern development practices including TDD and CI/CD.

WORK EXPERIENCE

Software/DevOps Engineer - Freelance on Upwork

December 2023 – Present

Upwork

Remote

- Developed and integrated APIs, including a custom SMS service using Africa’s Talking API and a real-time notification system, enhancing user engagement.
- Worked on setting up continuous integration and deployment pipelines on GitHub, automating tests, and ensuring streamlined deployments for client projects.

Software Solution Architect – Fintech

December 2023 – December 2024

Huawei Technologies

Nairobi, Kenya

- Designed and deployed scalable architectures for mobile money and digital finance platforms (VOOMA, M-PESA, Cashia, ZIDII) serving millions of users
- Improved project efficiency through implementation of Acceptance Test Plans to validate solutions designed
- Reduced integration errors by implementing robust architectural patterns and documentation
- Enhanced development velocity through optimization of agile practices and sprint planning
- Drafted functional requirement specifications (FRS), configuration requirement documents and Acceptance Test Plans for system functionalities
- Coordinated with cross-functional teams to ensure successful system integrations deployment of new features to the production environment

Software Service Engineer – Infrastructure

July 2023 – December 2023

Huawei Technologies

Nairobi, Kenya

- Maintained critical overdraft system with 99.999% uptime through proactive monitoring and optimization
- Reduced security incidents by 2% through implementation of enhanced security measures
- Improved operational efficiency through data-driven system optimizations
- Implemented automated monitoring and alerting systems for early incident detection
- Enhanced system security through regular updates and threat analysis

Backend Software Engineer (Part-time)

September 2023 – September 2024

Zuyu

London, UK(Remote)

- Developed secure authentication APIs using MERN (MongoDB, Express.js, React and Node.js) stack with TypeScript to handle millions of requests
- Implemented role-based access control system enhancing platform security and improving compliance
- Optimized API performance through caching strategies and database query optimization
- Collaborated with frontend team to ensure seamless integration with backend authentication system
- Participated in code reviews and technical design discussions to ensure best practices

Data Analyst (Intern)

June 2021 – August 2021

Shining Hope For Communities(SHOFCO)

Nairobi, Kenya

- Automated data processing and reporting using Python, generating over 300 reports to optimize COVID-19 vaccination strategies.
- Analyzed data trends to support decision-making, contributing to a 2% increase in vaccination rates through data-driven insights
- Streamlined report generation through process automation

## EDUCATION

<b>Software Engineering</b> <i>ALX-Africa(Holberton School)</i> <ul style="list-style-type: none"><li>▪ Intensive 12-month software engineering program (70 hours/week)</li><li>▪ <b>Focus::</b> Low-Level Programming, High-Level Programming, DevOps</li></ul>	<b>August 2022 – August 2023</b> Nairobi, Kenya
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<b>BSc. Mathematics and Computer Science</b> <i>Kenyatta University</i> <ul style="list-style-type: none"><li>▪ <b>Major:</b> Applied Mathematics and Computer Science</li><li>▪ <b>Relevant Coursework:</b> Data Structures and Algorithms, Probability and Statistics, Linear Algebra, Numerical Analysis, Discrete Mathematics, Object-Oriented, Programming, Database Systems, Computer Networks, Human-Computer Interaction, Neural Networks.</li></ul>	<b>September 2018 – July 2023</b> Nairobi, Kenya
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## TECHNICAL SKILLS

- **Programming Languages:** Python, TypeScript, JavaScript, C, Bash
- **Backend Frameworks:** Node.js, Express.js, NestJS, Flask, FastAPI
- **Databases:** PostgreSQL, MySQL, MongoDB, Redis
- **Machine Learning:** TensorFlow, PyTorch, scikit-learn, Matplotlib, Seaborn, MLOps
- **DevOps & Tools:** Docker, Kubernetes, AWS, Jenkins, GitHub Actions
- **Testing & Quality:** Unit Testing, TDD, Integration Testing, CI/CD
- **Architecture:** REST APIs, Microservices, Event-Driven Design
- **Security:** OAuth2, JWT, RBAC, API Security
- **Version Control:** Git, GitHub

### NOTABLE PROJECTS:

#### [Shell in C](#) | Systems Programming

- Developed UNIX command interpreter in C
- Implemented process management and command execution
- Featured file I/O handling and environment variable management

#### [Airbnb Clone](#) | Full-Stack Application

- Built complete platform with user authentication and booking system
- Implemented RESTful APIs and database management
- Technologies: Python, Flask, SQLAlchemy, JavaScript

#### [Raycasting Engine](#) | Graphics Programming

- Created raycasting engine in C with real-time rendering
- Implemented collision detection and spatial algorithms
- Optimized performance for smooth gameplay

### REFERENCES:

1. Vincent Omwoma - Product Manager, Huawei Kenya  
Email: [dvinomweku@gmail.com](mailto:dvinomweku@gmail.com)
2. Victor Omondi - Former Product Manager Fintech Products, Huawei Kenya  
Email: [victoromondi@gmail.com](mailto:victoromondi@gmail.com)
3. Benjamin Mkapa - Site Reliability Engineer, Huawei Kenya  
Email: [benjaminmanyaky@gmail.com](mailto:benjaminmanyaky@gmail.com)
4. Faith Nancy - Deputy Human Resources Director, Huawei Kenya  
Email: [faith.nancy@huawei.com](mailto:faith.nancy@huawei.com)