

DENNIS ATONYA

SOFTWARE ENGINEER

denatonya@gmail.com · <https://github.com/dentonya> · www.linkedin.com/in/dennis-atonya

Nairobi, Kenya

PROFESSIONAL PROFILE

Software Engineer with expertise in designing secure, scalable systems with a focus on authentication, authorization, and identity management. Proven track record building OAuth2.0/OpenID authentication services, enforcing security best practices, and delivering production-grade code with 90%+ test coverage. Experienced in cloud deployments across AWS, Azure, and GCP.

WORK EXPERIENCE

SunCulture Kenya Limited

January 2025-Present

Software Engineer II

- Develop and maintain scalable microservices using Node.js, TypeScript, Python, and NestJS for high-performance software systems
- Built critical services: Authentication Service (OAuth2.0/OpenID), Notification Service (multi-channel messaging via SMS, email, Slack, WhatsApp), Customer Marketplace Platform, and AMT (Accounts Management Tool)
- Optimize system performance through AWS RDS, Redis, and Kafka integration with cloud deployments on AWS, Azure, and GCP
- Lead Cash Release App development for streamlined expense tracking and approvals for finance operations
- Conduct comprehensive code reviews, enforce best practices, and maintain 90%+ test coverage through unit/integration testing
- Mentor junior engineers and foster collaborative team culture while contributing to sprint planning and agile practices
- Collaborate cross-functionally with QA, DevOps, and Product teams to deliver end-to-end features and system improvements

Savannah Informatics Ltd

May 2024 - January 2025

Software Engineer

- Developed comprehensive healthcare management systems including SHA Provider Portal and Slade360 Advantage for streamlining patient administration, clinical care, and revenue cycle management in health care centres.
- Built and maintained RESTful APIs using Django REST Framework, enhancing system performance and scalability by 40%
- Implemented robust microservices architecture for handling background tasks and high-concurrency services
- Integrated eTIMS for seamless billing and compliance, and USSD workflows for simplified patient enrollment
- Utilized PostgreSQL for complex relational database management and optimization
- Maintained 95%+ test coverage using Pytest for comprehensive unit and integration testing
- Participated in technical documentation and RFC processes via Confluence, ensuring knowledge sharing across teams

Qaribuhub Solutions LTD

May 2024 - Present / Part Time

Software engineer Contributor

- Build scalable, secure backend services using Django and Django REST Framework for service marketplace platform
 - Develop responsive frontend components with React, JavaScript, and modern HTML/CSS practices
 - Implement advanced geolocation and smart search features to enhance user discovery of nearby services
 - Integrate secure data practices including account verification, password hashing, and real-time notifications
 - Contribute to platform architecture decisions and deployment strategy using Docker and AWS infrastructure
-

eProd-Solutions Ltd**June 2022 - April 2024****Software Engineer**

- Developed and maintained eProd ERP system using Delphi and SQL, serving clients across multiple countries.
- Built a comprehensive farmer enrollment and validation system using MasterCard Community Pass APIs for digital ID processing.
- Created Windows services for farmer-produce traceability website and developed language translation tools.
- Designed and implemented survey generation tool and administration generator for multi-country deployment.
- Built Proof of Concept desktop application for bank payments utilizing vBank financial APIs for Nigerian clients
- Managed complex SQL and MySQL databases supporting enterprise-level ERP operations
- Utilized Jira for sprint-based project management and Tortoise SVN for efficient version control and collaboration
- Contributed to network management and hardware maintenance while engaging in daily stand-ups and agile practices

eProd-Solutions Ltd**Jan 2022 - April 2022****Student Intern**

During my internship, I worked with Delphi programming, software documentation, and project management tools like Jira and Trello, with responsibilities including:

- Collaborated on the development of the company's Moodle e-learning site.
- Contributed to successful software documentation on various financial APIs.
- Worked on minor Delphi projects to improve Delphi and MySQL skills

Section.io**Feb 2021 - April 2022****Technical Writer(Freelance)**

- Authored comprehensive technical articles and tutorials using Markdown for the Section Edge Platform
- Built tutorial projects demonstrating Python, Django REST Framework, and React JS best practices
- Contributed to open-source Section.io article repository, collaborating with technical experts to meet publication deadlines.

PROJECTS

- [eLima](#) ERP System – Built a full-stack ERP for farmer registration, produce collection, and payments using Python (Django REST), React JS, and PostgreSQL. Currently being used for produce collection with 1K+ farmers registered and 15K+ kg of produce processed and paid out.
 - Collaborated on an [e-commerce](#) platform for selling pet accessories, including checkout features and integrated M-Pesa payments.
 - Worked on the AI-Enhanced Intimate Partner Violence (IPV) Prediction System— a smart platform that uses machine learning and geolocation data to predict IPV risk scores and support faster, more effective responses.
 - eLearning Platform – Collaborating on an online learning platform using Node.js for scalable backend development.
 - RentEasy – Developing a house-hunting app with React JS and NestJS, focusing on user-friendly listings and property management.
 - GraphQL Web Service – Created a secure, interactive link management tool using Django, GraphQL (graphene-django), and JWT authentication.
 - Web Service – Created a Python web service with Django REST Framework and PostgreSQL, implementing OAuth2 authentication and integrating Africa's Talking SMS Gateway for secure messaging.
 - Inventory Forecasting System – Designed a predictive analytics tool using XGBoost, integrated into a web app with Django REST and React for inventory management.
 - University Society System – Contributed to a records management system using Python, Django REST, and React for organized data handling.
-

SKILLS

- Programming Languages: Python, JavaScript, TypeScript, Node.js, Delphi, NestJS
 - Frontend Development: React JS, HTML, CSS, Tailwind
 - API Design & Integration: REST, GraphQL
 - Databases: PostgreSQL, MySQL, SQLite
 - ORMs: Django ORM, Prisma
 - Testing: Pytest, Unit and Integration tests
 - Security & Identity: OAuth2, OpenID Connect, JWT, HTTPS, RBAC
 - Version Control: Git, GitLab, SVN
 - DevOps: GitHub Actions, Docker, CI/CD, Monitoring (basic)
 - Cloud: AWS (RDS, EC2, S3), Azure, GCP
 - Tools & Methodologies: Agile, Jira, Trello, Confluence
 - Soft Skills: Proactive, eager to learn, effective communicator, collaborative team member
-

EDUCATION

Jomo Kenyatta University of Agriculture and Technology

Bachelor of Science in Computer Technology : 2018-2022

First Class Honours

Mastered skills encompassing software development (Python, Django), cybersecurity, containerization (Docker, Kubernetes), networking, and machine learning, complemented by web development, database management, computer graphics, and project management skills.

Worked on various projects:

- Inventory Forecasting Management System using Python, Django Rest Framework, React, and a trained XGBoost model for predictive analytics in machine learning.
- People detection and tracking system using centroid-tracker and object_trackable in Python.
- Elevator Simulator using Python and Tkinter.
- Inventory Management System using Django and Docker for containerization.

QA TestLab Certification

Fundamentals of Software Testing: 2022

Gained skills in

- Web, mobile, and game application testing. Using Bug Tracking Systems (Mantis) for bug reporting and TestLink for test case creation.
-

REFERENCE

1. Sherman Ouko

Microsoft, Product Manager II
Email: oukosherman@gmail.com

2. Kevin Obote

Data Scientist | Software Engineer
Email: kevinobote94@gmail.com
