Kelyn Njeri

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LinkedIn • GitHub • Portfolio • Nairobi, Kenya

Senior Software Engineer

Accomplished and visionary Senior Software Engineer with extensive experience and a proven track record of orchestrating successful development projects. Adaptable and resourceful, excel in crafting innovative solutions and optimizing team performance to meet and exceed project objectives. Skilled in architecting robust systems, fostering cross-functional collaboration, and implementing cutting-edge technologies, dedicated to driving excellence in software engineering through strategic leadership and technical expertise. Passionate about mentoring and cultivating talent, thrive on inspiring teams to deliver high-quality solutions that align with organizational goals.

Technical Proficiencies

Languages:	Python, Golang, JavaScript, TypeScript, Dart, NodeJS, SQL, HTML5, CSS3
Frameworks:	Flutter, Firebase, React JS, Flask, FastAPI, Django, Django Rest Framework, Pytest, Alembic, SQLAlchemy, Celery, NextJS, React Native, NestJS, Express JS, Tailwind, Bootstrap, Bulma, Jest, Mocha, Prisma
Databases & Cloud:	MongoDB, PostgreSQL, MySQL, DynamoDB, Redis, Supabase, Amazon Web Services (AWS), Google Cloud Platform (GCP)
DevOps:	GitHub Actions, Gitlab CI, Docker, Kubernetes, Terraform, Circle CI, AWS ECS, AWS Fargate, AWS Code Build, AWS Code Commit, GitHub, Gitlab, BitBucket, Kafka, Amazon SNS, Amazon SQS, Amazon Cognito, Amazon IVS, Amazon Kinesis, AWS Lambda, RabbitMQ, Serverless
Third-Party APIS:	Stripe, Twilio, Africa's Talking, Nexmo, Freshbooks API, PesaPal, Flutterwave, Paystack, Daraja API, Sendgrid, Livekit
Software Architecture:	Microservices Design, Database Design, Command Query Responsibility Segregation (CQRS), Design Patterns, Event-Driven Microservice Architecture, Domain Driven Design (DDD), Distributed Systems, Clean Code

Professional Experience

PowWater, Nairobi, Kenya   **March 2024 – Present**
Senior Software Engineer (Fullstack)

Worked on automating the logistics system of the company hence allowing smooth operations in regards to getting our water orders to our customers in a shorter time and also maximizing company profits by reducing the distance covered by our drivers in regards to order fulfillment and also optimizing our resource utilization.

- Increased percentage of orders that were system assigned from 30% to 65% by rewriting it in **TypeScript**.
- Implemented unit tests in our legacy system to improve code quality.
- Spearheaded automation projects i.e fill site assignment, order assignment, route optimization and fleet management
- Reduced average delivery time of difference of system assigned orders to manually assigned orders from 45 minutes to 5 minutes.
- Strategically implemented test and focus groups to gather valuable insights and feedback, contributing to continuous improvement and refinement of the automation system
- Undertook development of sophisticated machine learning models, leveraging capabilities to address diverse business use cases, thereby enhancing platform's functionality and relevance.

Naya Labs, Washington D.C., USA   *January 2022 – March 2024*
Lead Senior Software Engineer |

Naya Labs was a talent hub where I had the opportunity to work with multiple early-stage startups as a part of their diverse remote engineering teams. My role involved overseeing team timelines, ensuring smooth execution of code sprints, and translating complex company design specifications into robust, scalable business functionalities. I contributed significantly to the success of various projects by utilizing a wide range of technologies and tools.

Key Projects & Achievements:

- **OmniArsenal | DevOps Platform Development**
    - **Role:** Senior Software Engineer (Golang)
    - **Technologies:** Golang, PostgreSQL, Kubernetes, Docker, AWS, React
    - **Achievements:**
        - Architected and implemented a comprehensive DevOps platform to manage CI/CD pipelines, log monitoring, and automated test coverage.
        - Enhanced workflow efficiency by 40% through optimized CI/CD processes.
        - Improved system scalability and reliability by leveraging Kubernetes and Docker for containerized deployments.
- **Veenly | News Aggregation Platform**
    - **Role:** Senior Frontend Engineer (Svelte)
    - **Technologies:** Svelte, Vercel, AWS Cognito, AWS S3
    - **Achievements:**
        - Successfully learned Svelte within a week, leading to the development of a responsive frontend for the platform.
        - Implemented secure authentication and data storage solutions, improving platform security.
        - Deployed the platform on Vercel, ensuring minimal downtime and high performance.
- **Hero Alert | Social Activism Application**
    - **Role:** Lead Backend Engineer (JavaScript)
    - **Technologies:** JavaScript, PostgreSQL, AWS Fargate, Twilio, Firebase, React Native
    - **Achievements:**
        - Led the backend development for a social activism app, enabling real-time issue reporting and coordination.
        - Integrated Twilio for communication and AWS Fargate for containerized deployments.
        - Delivered a seamless user experience by effectively integrating the backend with the mobile frontend.
- **Backbone | Fintech Application for SMEs**
    - **Role:** Lead Software Engineer
    - **Technologies:** TypeScript, AWS EventBridge, AWS SageMaker, AWS S3, MongoDB, Docker, Twilio
    - **Achievements:**
        - Managed the development and successful launch of a fintech application aimed at streamlining business tasks and improving accounting processes for SMEs.
        - Built and integrated the backend, working closely with the mobile engineer for frontend integration.
        - Established efficient engineering processes, leading to a 25% increase in team productivity and timely delivery of all project milestones.

Notable Achievements Across Projects:

- Achieved a 30% reduction in API latency at OmniArsenal by optimizing SQL queries, enhancing overall system responsiveness.
- Orchestrated a successful migration from GCP to AWS at Hero Alert, leveraging advanced cloud capabilities to streamline operations.
- Led a global remote engineering team at Backbone, ensuring high-quality output and the successful delivery of software products.

Sono Labs, Nairobi, Kenya　　　　　　　　　　　　　　　　　　　　**April 2021 – January 2022**
Software Engineer

Mentored and guided junior developers, fostering growth and ensuring high-quality code contributions. Conducted thorough testing, encompassing unit and integration tests, to guarantee reliability and functionality of application. Collaborated seamlessly with cross-functional teams to enhance overall development efficiency and product excellence.

- Created advanced Flutter Nutrition app for seamless nutrition tracking and personalized recommendations, incorporating Tensorflow and Python for innovative recommender systems.
- Collaborated to architect our systems from the ground up hence ensuring scalability, consistency, availability and reliability
- Established sophisticated **Machine Learning** food detection system using **TensorFlow** and **Python**, automating precise food entry logging for user convenience.
- Successfully integrated major payment gateways, including **M-Pesa Daraja API**, ensuring secure and reliable transactions for client projects.

Various Startups, Nairobi, Kenya　　　　　　　　　　　　　　　　　**May 2019 – January 2022**
Senior Software Engineer

Developed scalable and dependable software systems while conducting comprehensive testing, including both unit and integration tests, ensuring reliability and functionality of applications. Collaborated with cross-functional teams to evaluate project requirements, refine database configurations, and ensure smooth integration with various AWS services. Took lead in architecting complex software systems, making strategic decisions to ensure scalability, modularity, and ease of maintenance.

- Enhanced performance by minimizing database calls and introducing caching, leading to faster response times and heightened user satisfaction.
- Applied design thinking in collaborative sprints to provide customized solutions that surpassed client expectations.
- Successfully refactored and migrated large systems between cloud providers, such as GCP to AWS and vice versa, ensuring seamless transitions and improved operational efficiency.

Various Startups, Nairobi, Kenya　　　　　　　　　　　　　　　　　**August 2017 – April 2019**
Junior Software Engineer

Built websites and enhanced features in existing software systems. Streamlined and enhanced complex codebases to improve readability and maintainability. Achieved seamless continuity by transferring user data across databases, safeguarding data integrity. Adhered to coding standards and best practices to ensure consistency and maintainability throughout the codebase.

- Improved software performance to achieve quicker responsiveness and reduced load times, enhancing overall user experience.

Additional Experience

Lead Software Engineer, Fundle, Kigali, Rwanda
- Developed a revolutionary financial literacy search engine using Python/Django and Elasticsearch, enhancing access to extensive financial information in a user-friendly manner.
- Implemented comprehensive testing, including unit and integration tests, to ensure the reliability and functionality of the application.
- Innovatively designed a natural language processing model with Tensorflow for voice-based searches and established a scalable microservice architecture with Python/Flask, improving system performance and communication.

Education

Master of Science in Computer Science; Major – Artificial Intelligence (Ongoing)
University of London, London, United Kingdom (Online)

Data Science & Machine Learning: Making Data Driven Decisions (Ongoing)
Massachusetts Institute of Technology, Boston, USA (Online)

Bachelor of Science in Computer Science; Major – Software Development
Laikipia University, Nyahururu, Kenya

Applied Data Science Program: Leveraging AI For Effective Decisions
Massachusetts Institute of Technology, Boston, USA (Online)

Data Science & Machine Learning: Making Data Driven Decisions (Ongoing)
Massachusetts Institute of Technology, Boston, USA (Online)