

# Nyuydine Bill Leynyuy

## Senior Full-Stack & AI Engineer · Software Architect

*Designing and building production software systems: architecture, full-stack engineering, AI services, and cloud infrastructure.*

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Software engineer and architect who thinks in systems before writing code. I work across the full stack, spanning product and software architecture, backend, frontend, mobile engineering, AI systems, and cloud infrastructure, and I generally spend more time on the design than on any single line of implementation. I built and maintain ResolveMeQ, an AI-powered SaaS platform for IT-helpdesk automation; work as a Full-Stack & AI Engineer on UmEmployed, a USA-based AI recruitment platform; and led the architecture of the Cameroon Digital Trust Network, a national-scale digital trust platform. Much of my work centers on integrating AI into production systems in ways that stay reliable, observable, and secure, and on running the infrastructure that keeps them healthy on Azure and AWS. I like taking an idea through architecture, implementation, deployment, and the ongoing engineering work of keeping a system running well.

### CORE EXPERTISE

|                        |                                        |                               |
|------------------------|----------------------------------------|-------------------------------|
| Software Architecture  | Product & Solution Architecture        | System Design                 |
| AI Systems Engineering | Distributed Systems                    | Cloud Infrastructure & DevOps |
| Full-Stack Development | Mobile Engineering                     | REST API Design               |
| Database Design        | Production Reliability & Observability | Product Engineering           |

**Domain Experience** Recruitment & HR Tech · Education · Food Delivery · Property Tech · IT Service Management · Artificial Intelligence · Digital Trust & Verification

### SELECTED ACHIEVEMENTS

- ▶ Designed, built, and shipped multiple production web and mobile applications, carrying each one from architecture through deployment, monitoring, and long-term maintenance.
- ▶ Built ResolveMeQ, an AI-powered SaaS platform, architecting its service boundaries and building out its backend, frontend, AI services, and cloud deployment as independently maintainable pieces.
- ▶ Delivered AI-powered products across recruitment, education, trust verification, and IT automation, each with its own tradeoffs between accuracy, latency, and reliability.
- ▶ Shipped and maintain production applications on both the Google Play Store and Apple App Store, including release management and post-launch support.
- ▶ Architected Explainable AI systems and enterprise verification pipelines for a national-scale digital trust initiative, with auditability and human review built into the design.
- ▶ Set up and run cloud deployments across Azure, AWS, Docker, GitHub Actions, and CI/CD pipelines, with monitoring and observability treated as part of the deployment, not an afterthought.

### ARCHITECTURE & TECHNICAL LEADERSHIP

- ▶ Design software, product, and system architecture before implementation, defining service boundaries, APIs, and data models up front.

- ▶ Plan implementation in phases, treating scalability, maintainability, and security as explicit design constraints rather than afterthoughts.
- ▶ Make and document architecture decisions, and set technical direction on the projects I lead.
- ▶ Design REST APIs, relational database schemas, and modular, distributed system architectures built to extend rather than be rewritten.

## TECHNICAL SKILLS

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**Languages** Python, JavaScript, TypeScript, Java, C, C++

**Frontend & Mobile** React, Next.js, React Native, Tailwind CSS, Bootstrap

**Backend** Django, Django REST Framework, FastAPI

**Databases** PostgreSQL, MySQL, SQLite

**Cloud & DevOps** Docker, Docker Compose, Kubernetes, Helm, GitHub Actions, CI/CD, Azure, AWS, Cloudflare

**Security & Access Control** Authentication & Authorization, OAuth2, JWT, IAM, Secure API Design

**AI & Data** Machine Learning, NLP (spaCy), Recommendation Systems, Prompt Engineering, LLM & AI Model Integration, AI Orchestration, Explainable AI

**Architecture** System Design, Microservices, Distributed Systems, Enterprise & Solution Architecture, REST/GraphQL API Design

**Practices** Git, Linux, Postman, Grafana, Prometheus, Agile/Scrum, TDD

## AI ENGINEERING

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- ▶ LLM integration & prompt engineering: embedding large-language-model and ML capabilities into production applications with structured, reliable output.
- ▶ AI workflow orchestration: designing multi-step reasoning pipelines and AI-powered automation across services, with clear boundaries between orchestration and business logic.
- ▶ AI microservices & model deployment: building, deploying, and scaling FastAPI inference services with low latency and production monitoring.
- ▶ Applied ML: recommendation systems, resume analysis, resume scoring, and skill extraction in live products, iterated against real usage rather than offline metrics alone.
- ▶ Explainable AI & reasoning: architecting transparent, auditable AI reasoning systems with human-review guardrails for high-stakes decisions.

## FLAGSHIP PROJECTS

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**ResolveMeQ** *Founder, Sole Architect & Engineer · 2025 – Present*

*AI-powered SaaS platform for IT-helpdesk automation, taken from concept to a deployed beta.*

- ▶ Designed the architecture up front as a modular, service-oriented system, separating the Django core API, a FastAPI AI service, and the React client into independently deployable services, keeping AI workloads isolated, the codebase maintainable, and each piece free to scale on its own.
- ▶ Built the Django backend and REST API with authentication, authorization, subscription billing via DODO Payments, and the core business logic, backed by a normalized PostgreSQL schema with indexing and query tuning for the ticket and workflow data.
- ▶ Designed and deployed the FastAPI AI microservices that analyze, triage, and resolve support tickets, orchestrating the multi-step AI workflow behind automated resolution and handling model deployment and inference at production latency.
- ▶ Developed the React application, including operator dashboards built around real support-team workflows and a reusable component library, alongside SEO-focused Next.js marketing and landing pages.

- ▶ Deployed the platform to the cloud with environment configuration, monitoring, and CI, and continue to handle releases, performance tuning, and maintenance, treating production reliability as an ongoing engineering responsibility. Currently in beta with early adopters, with pitch materials prepared for a pre-seed raise.

### **Cameroon Digital Trust Network (CDTN)** *Lead Architect · Independent · R&D*

*Enterprise architecture initiative for a national-scale, AI-powered digital trust and verification platform.*

- ▶ Designed the long-term architecture for a national-scale digital trust and verification platform, structured as modular reasoning, verification, correlation, intelligence, and policy layers with defined component boundaries and integration contracts, planned for phased implementation and scale.
- ▶ Designed the AI architecture: an Explainable AI reasoning engine and a Trust Intelligence Pipeline spanning evidence correlation, multi-engine risk scoring, and knowledge- and policy-driven verification, with transparency, auditability, and access control as first-class design concerns.
- ▶ Drove the technical decisions and authored the architecture documentation, including governance guardrails such as mandatory human review for sensitive assessments.

## **PROFESSIONAL EXPERIENCE**

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### **Full-Stack & AI Engineer, UmEmployed** *USA (Remote) · 2023 – 2026*

*Worked across backend, frontend, mobile, AI, and cloud engineering on a single recruitment platform, building each layer to function as one coherent product rather than a set of separate features.*

- ▶ Backend Architecture: designed and built the Django and Django REST Framework backend, including API architecture, authentication and authorization (including OAuth2-based flows), Stripe and PayPal payment integration, and database design.
- ▶ Frontend Engineering: built React features and dashboard interfaces that surface the platform's AI outputs (resume scores, match results, recommendations) in a form recruiters and candidates could act on directly.
- ▶ Mobile Engineering: built the cross-platform React Native app end to end, shipped it to both the Google Play Store and Apple App Store, and maintained it in production, including releases and bug fixes.
- ▶ AI Engineering: built resume parsing, resume scoring, AI job matching, skill extraction, an AI recommendation system, MCQ interview-question generation, a Career Roadmap engine, and a Skills Guide engine, wiring them into the backend and frontend as one connected pipeline rather than isolated models.
- ▶ Cloud & Deployment: deployed on Azure and Docker, migrated databases to PostgreSQL with Alembic, and maintained CI/CD and infrastructure (AWS S3, RDS, Lambda, IAM), keeping deployments repeatable and the environment secure.
- ▶ Deployed 6+ AI models at over 85% accuracy for résumé scoring, job matching, and personalized recommendations, in production use by 500+ users.

### **Software Engineer, AI & Frontend, Skye8** *Remote · 2025*

- ▶ Built a plagiarism-checker microservice using NLP and FastAPI, containerized with Docker and integrated via REST and gRPC endpoints.
- ▶ Automated CI/CD workflows with GitHub Actions, cutting deployment time by 40%, and built Grafana dashboards for real-time monitoring and faster production debugging.
- ▶ Malegado, Frontend & Production Engineering: built production Next.js landing pages and dynamic routing; implemented SEO optimization, sitemap generation, and public indexing; and handled authentication improvements, deployment support, performance optimization, and production debugging.

### **Full-Stack Engineer, ZiloTech** *Cameroon · 2023 – 2025*

*Delivered multiple production products end to end across EdTech and food delivery, from backend design through mobile and cloud deployment.*

- ▶ Z-Learn (EdTech): architected and built the backend (Django REST, JWT authentication, PostgreSQL, REST APIs) with AI-powered tutoring modules that personalize learning paths per student, and integrated local payment channels for course enrollment and billing.
- ▶ Yamo (Food Delivery): built the React Native app and Django backend with real-time order tracking and secure payment integration, plus a companion React website; deployed to the Google Play Store, reaching 1,000+ downloads.
- ▶ Machine Learning: designed and trained recommendation systems and customer-insight models, evaluated against live usage rather than offline metrics alone.
- ▶ Cloud Infrastructure: built CI/CD with GitHub Actions and Docker, and managed infrastructure across Azure App Services, AWS EC2, S3, and Azure Blob Storage, with an eye toward keeping deployments reliable as traffic grew.

#### **Full-Stack Software Engineer, Various US Clients** *USA (Remote) · 2023 – Present*

- ▶ Designed and shipped web applications with Django, React, and Tailwind CSS, deployed with Kubernetes Helm and GitHub Actions.
- ▶ Integrated third-party APIs including Stripe and Twilio with attention to secure API design, collaborated in agile teams maintaining 90% test coverage, and mentored junior developers.

#### **Mobile Engineer, LandlordNde24** *Property Tech · Freelance · 2024 – 2025*

- ▶ Deployed the LandlordNde24 React Native app (Property Tech) to both the Google Play Store and Apple App Store; managed release cycles and production maintenance.

#### **Open Source Contributor, Daytona & Outreachy (Fedora)** *Freelance · 2024 – 2025*

- ▶ Contributed backend modules to Daytona, an open-source development-environment platform, working in the public codebase alongside its core maintainers on container orchestration features.
- ▶ Improved core modules, test coverage, and documentation under Outreachy (Fedora OS), and helped streamline onboarding for incoming contributors to the project.
- ▶ Worked in the open throughout: public code review, issue triage, and design discussion with a distributed maintainer community, rather than in a closed team.

## **EDUCATION & CERTIFICATIONS**

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**B.Eng. Computer Engineering** University of Bamenda · 2022 – 2026

**Certified Full-Stack Software Engineer** ALX Africa · 2023 – 2024

**Azure Cloud Analyst** Microsoft Learn Student Ambassadors · 2023 – 2024

## **SELECTED PRODUCTION DEPLOYMENTS**

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- ▶ Google Play & Apple App Store: UmEmployed mobile app, live and maintained.
- ▶ Google Play Store: Yamo v1.0, released and maintained (April 2025).
- ▶ Azure DevOps Pipelines: automated build-test-deploy for Z-Learn (20+ releases, 2024–2025).
- ▶ AWS S3 / CloudFront: static asset delivery for Skye8 ML services at 35 ms P95 latency worldwide.