

Lorraine Moyo

Cape Town | Software Engineer

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Professional Summary

Software Engineer with 5 years of experience designing and delivering backend platforms, data-driven applications, APIs, and cloud-based solutions within the financial technology and asset management domains.

Experienced in engaging with business stakeholders, product teams, and end users to understand complex requirements and translate them into scalable technical solutions. Strong background across the full software development lifecycle, from requirements gathering and solution design through implementation, deployment, and production support.

Passionate about solving business problems through technology, with expertise spanning backend engineering, data platforms, workflow orchestration, cloud-native architecture, and AI-powered applications. Proven ability to balance technical excellence with practical business outcomes while driving delivery across cross-functional teams.

Technical Skills

Category	Skills
Languages	Python, C#, SQL, JavaScript
Backend & API Development	FastAPI, REST APIs, OpenAPI/Swagger, API Design, Backend Service Development
Architecture & System Design	Solution Architecture, System Design, Distributed Systems, Microservices, Cloud-Native Applications, Scalable Platform Design, Object-Oriented Design
AI & Data Engineering	Claude Code, Retrieval-Augmented Generation (RAG), LLM Applications, OpenAI APIs, AI Agent Architectures, Prompt Engineering, Semantic Search, Vector Databases (pgvector), AI Solution Design, SQL Server, PostgreSQL, SQLAlchemy, Database Design, Data Modelling, Schema Design, Query Optimisation, SCD2, Data Warehousing
Cloud, Infrastructure & DevOps	Azure, Docker containerisation, Azure Blob Storage, Azure Key Vault, GitHub Actions, Azure DevOps, CI/CD Pipelines
Data Platforms & Workflow	Apache Airflow, ETL/ELT Pipelines, Data Integration, Workflow Orchestration, Azure Databricks
Observability	OpenTelemetry, Jaeger, Azure Application Insights, Logging, Performance Monitoring, Incident Investigation

Category	Skills
Code quality & testing	Unit Testing, Integration Testing, Test Automation, Code Reviews, Quality Assurance
Engineering Practices & Leadership	Git, Agile/Scrum, Confluence, Technical Documentation, Technical Design Reviews, Requirements Analysis, Solution Design Workshops, Technical Leadership, Cross-Functional Collaboration, Agile Delivery, Mentoring, Stakeholder Management, JWT Authentication, Secure API Design

Professional Experience

Software Engineer | Ninety One

2023 – Present

- Designed and delivered scalable backend services and APIs using Python and FastAPI, underpinning business-critical investment and sustainability platforms serving complex financial and regulatory requirements.
 - Architected and implemented data integration, transformation, and orchestration pipelines using Apache Airflow, Azure Databricks, PostgreSQL, and Azure, supporting analytics, reporting, and investment decision-making across the business.
 - Contributed to solution architecture and domain-level platform design, partnering with product, engineering, and business stakeholders to evolve system capabilities and establish technical direction.
 - Instrumented distributed tracing and observability across production services using OpenTelemetry, Jaeger, and Azure Application Insights, significantly reducing time to diagnose and resolve production incidents.
 - Drove database performance improvements through systematic query optimisation, schema redesign, and data access pattern analysis, improving reliability and throughput across critical application layers.
 - Established and maintained CI/CD pipelines and automated testing practices using Pytest and GitHub Actions, raising deployment confidence and reducing manual overhead across the engineering team.
 - Owned production support and incident management for critical business platforms, leading root cause analysis and remediation across distributed backend and data systems.
 - Mentored engineers through technical collaboration, design reviews, and documentation, while contributing to Agile delivery processes including sprint planning, refinement, and continuous improvement.
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Application Developer | Intenda

2021 – 2023

- Built and maintained scalable enterprise web services and backend APIs using C#, .NET Framework, and ASP.NET Web API, supporting business-critical application integrations.
- Delivered high-availability backend solutions across enterprise-scale systems, contributing to architecture discussions and translating business requirements into working technical implementations.
- Strengthened application stability and long-term maintainability through active participation in code reviews, applying solid Object-Oriented Design principles throughout.
- Diagnosed and resolved complex defects across legacy and modern systems, developing practical debugging instincts and a strong understanding of production system behaviour.
- Contributed across the full software development lifecycle within Agile teams, gaining hands-on experience in sprint planning, implementation, testing, and deployment.

Education

Bachelor of Science in Information Technology
Pearson Institute of Technology 2017-2019

Azure Data Fundamentals
Microsoft 2022
