

LEHLOHONOLO DUNCAN MOLABA

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"I am driven by financial discipline and operational efficiency. If an organization is not optimistic about the future of technology, I am definitely not for them."

— **Lehlohonolo Duncan Molaba**

PROFESSIONAL SUMMARY

Systems builder, full-stack software engineer, and executive technology leader with expertise in Google Cloud Platform (GCP), Hostinger cloud infrastructure, payment integrations, custom ERP development, and team leadership. Proven track record managing **30+ employees, partners, and student executives** across commercial ventures, while architecting scalable web/mobile platforms serving **+34,000 users**. Experienced in building autonomous enterprise systems, cross-platform mobile apps (Flutter), fleet leasing, D2C e-commerce brands, ethical AI standards, and multi-team leadership.

CORE TECHNICAL & LEADERSHIP COMPETENCIES

- **Executive & Team Leadership:** Managing Cross-Functional Engineering Teams, Directing 25+ Delivery & Ops Partners, Equity Partner Management, Systems Delegation.
- **Engineering & E-Commerce:** Full-Stack Web & Mobile Development, Fleet Logistics Management, D2C Storefront Architecture, Technical Automation, RESTful APIs.
- **AI Developer Tools & Assistants:** Antigravity (Google DeepMind Agentic AI), GitHub Copilot, Claude Code, OpenAI Codex, Model Context Protocol (MCPs), Gemini CLI, Intel OpenVINO, crewAI (Multi-Agent Systems), RAG Pipelines, Taskade AI, Notion AI, Zapier AI Triggers, Ethical AI.
- **Languages & Frameworks:** Python (Primary), C# (.NET WPF), JavaScript/TypeScript (React, Vite, Node.js), **Flutter**, HTML5/CSS3, SQL/SQLite, Bash/Shell.
- **Cloud, Security & Tooling:** Google Cloud Platform (GCP - Primary), Hostinger Cloud, AWS, Secure Infrastructure Administration, CompTIA A+/Network+/Security+ Standards, Docker, Ozow & Paystack Integrations, PostgreSQL/SQLite, Git/GitHub.

WORK & PROFESSIONAL EXPERIENCE

Co-Founder & Chief Technology Officer (CTO) | **CartZA App** (cartza.co.za)

February 2025 – Present

- **Enterprise Merchant Partnerships:** Architected vendor integration pathways and digitized ordering channels for premier campus food enterprises and major commercial franchises, including **WOW Foods** and **The Deli**, serving a campus audience of **+34,000 members**.
- **Team Leadership & Ops Management:** Direct real-time operations, logistics, and workflow management for **25 student delivery and operations partners** across campus.
- **Association Founding & Executive Mentorship:** Co-founded the **CartZA Student Association** and appointed a **student executive leadership committee** (Chairperson, Operations, Finance, Marketing) to accelerate campus commerce innovation and mentor student leaders.
- **Cloud & Payment Architecture:** Architected end-to-end cloud infrastructure on Google Cloud Platform (GCP) and Hostinger, custom vendor integration APIs, and multi-channel payment gateway processing (Ozow & Paystack).

- **Platform Scale & Metrics:** Engineered systems driving **173.5% quarter-over-quarter revenue growth**, scaling the platform to **+3,000 app downloads** and **300+ completed marketplace orders**.
- **Prestigious National & International Awards:**
 - 🏆 **1st Place – Digital Transformation Category** (Sponsored by MTN) at Enactus SA Nationals 2026.
 - 🏆 **2nd Place – Entrepreneurial Leadership Category** (Sponsored by Harmony Gold Mining) at Enactus SA Nationals 2026.
- 🌐 **International Pitch Delegate:** Represented the University of the Free State (UFS) at the **SWEAT Africa International Pitching Competition**.
- 🎉 **Free State Top 10 Winner** at the **YAIE x ABSA Competition**.
- 🏆 **EDSA 2025 Overall Winner** at the University of the Free State (UFS).
- 📊 **Academic Recognition:** Selected as an official **UFS Honours Academic Case Study** in commercial innovation.
- **Data Automation & AI Operations:** Developed custom vendor transaction dashboards, automated audit engines, and piloted AI shopping assistant pipelines (*Zuri*) leveraging Antigravity and Gemini tools to optimize demand forecasting and reduce merchant stock waste.

Founder & Operations Manager

| Motorbike Rental Venture

June 2024 – February 2025

- **Micro-Leasing & Monetization:** Procured, maintained, and leased 2 commercial motorcycles to individual delivery couriers and logistics riders.
- **Asset Management & Divestment:** Managed individual lease contracts, routine vehicle maintenance, and cash flows before executing a strategic sale and asset liquidation to reallocate capital into software ventures.

Founder & Commercial Director

| Take Essentials (E-Commerce Brand)

November 2024 – Present

- **Multi-Category D2C Retail:** Architected and launched **Take Essentials**, a direct-to-consumer e-commerce brand specializing in **Fashion, Consumer Electronics/Gadgets, and Luxury Fragrances**.
- **Digital Storefront & Automation:** Built digital catalog management, automated checkout flows, inventory synchronization, and supplier sourcing pipelines.

Founder & Lead Software Engineer

| Infralitix (

infralitix.co.za

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March 2025 – Present

- **Autonomous Partner Structure & Operational Independence:** Co-founded Infralitix alongside 2 equity partners (Creative/Design Director and Sales/Operations Lead). Personally trained the operations partner in technical maintenance and support protocols, creating a self-sustaining operational framework that runs independently.
- **Agricultural Supply Chain & Egg Distribution ERP (Mashinini Interior & Construction):** Designed and built a custom enterprise distribution ERP platform featuring lot/batch tracking algorithms, shelf-life degradation modeling, perishable egg inventory controls, daily POS cash reconciliation, and merchant ledgers.
- **Kenel Management ERP & Genetic AI Suite (Gomora Boerboels):**
 - *Kenel ERP & Estrus Cycle Forecasting:* Built an end-to-end Kenel Management ERP incorporating heat period forecasting algorithms, automated breeding schedules, whelping tracking, and medical/vaccination compliance ledgers.
 - *Conversational AI & Lead Conversion:* Developed WhatsApp AI agents using Model Context Protocol (MCPs) that engage prospective international buyers 24/7, qualify leads, and automate high-value sales funnels.
 - *Pedigree Analytics & Predictive EBV Engine:* Developed a data-driven breeding analytics engine that parses pedigree lineages and SABBS linear appraisal sheets to calculate Estimated Breeding Values (EBV) and simulate offspring joint health (PennHIP/OFA).

Private Portfolio Advisor & Family Wealth Strategist

January 2024 – Present

- **Portfolio Management & Capital Allocation:** Oversee asset portfolios for high-net-worth family members, advising on capital deployment, risk mitigation, and cash flow optimization across business holdings and personal wealth.
- **Estate Planning & Wealth Preservation:** Structure estate planning frameworks, asset protection strategies, and succession plans to ensure tax-efficient wealth transfer and long-term financial security.

IT Support Technician & Systems Administrator

| MolarsTech

September 2023 – October 2025

- Delivered enterprise IT infrastructure support, hardware diagnostics, OS deployment, and local network administration for corporate and small business clients.

KEY TECHNICAL PROJECTS

SPAGIOS (Local AI Middleware Control Plane)

- Built a local Python middleware control plane integrating Model Context Protocol (MCPs), local LLM reasoning models (Intel OpenVINO), messaging APIs, and developer tooling (Notion AI/Taskade AI) for sovereign task automation.

Mancosa Academic & Financial Study Suite

- Engineered a dual-app study suite featuring a React + Vite verbatim syllabus browser and a C# .NET WPF desktop application for dynamic academic financial modeling and budget projections.

HONORS, LEADERSHIP & STRATEGIC ACHIEVEMENTS

-  **Award-Winning Competitive Chess Player:** Recognized for advanced strategic pattern recognition, analytical reasoning, tactics, and decision-making under high-pressure competitive environments.
-  **Enactus South Africa National Semi-Finalist Trophy Winner (2026).**

EDUCATION & CERTIFICATIONS

Academic Degrees & Technical Qualifications

- **Bachelor of Science (BSc) in Computer Science** — University of the People (*In Progress, 2023 – Present*)
- **Bachelor of Commerce (BCom) in Financial Management** — MANCOSA (*Transferred from University of the Free State, In Progress, 2020 – Present*)
- **Associate Degree / Secure Infrastructure Technician** — Boston City Campus (*Completed July 2024*)
- *Integrated Curriculum:* **CompTIA A+, Network+ (N+), and Security+ (S+)** combined hardware, networking & cybersecurity credentials.
- **National Senior Certificate (Matric)** — Completed in record time with a **Bachelor's Degree Pass** (*University Entrance Qualification*)

Certifications & Intensive Bootcamps

- **Generative AI Course for Software Engineers** — WeThinkCode
- **Multi AI Agent Systems with crewAI** — DeepLearning.AI
- **Software Engineering Intensive Bootcamp** — WeThinkCode (*Feb 2023*)
- **CompTIA A+ ce Certified & TestOut PC Pro Certified**

PROFESSIONAL REFERENCES

- **Richard Molefe** — Co-Founder & CEO, CartZA App | National Chairperson, Black Management Forum (BMF) Student Chapter.

- **Mrs. Chipo Mtabo** — Business Incubator Manager & Enterprise Advisor, University of the Free State (UFS) Business Incubator.
- *Additional professional and academic references available upon request.*