CORPORATE CAPABILITIES & CORE SERVICE OFFERINGS

Applied AI, Quantitative Feasibility & Enterprise Software Studio

We transition growing enterprises from manual operational busywork to automated systems, production AI & machine learning, and mathematically stress-tested capital decisions.

90 Days	10,000+	100%	POPIA
FREE DEFECT WARRANTY	MONTE CARLO SCENARIOS	CLIENT IP & SOURCE TRANSFER	SECTION 22 COMPLIANT

01. Applied AI, Classical ML & Production MLOps

Deploy deterministic AI agents, explainable tabular ML, and mathematical optimization.

- 24/7 WhatsApp & Web AI assistants + hybrid RAG over company PDFs & ERPs.
- Tabular Gradient Boosting (XGBoost, LightGBM, CatBoost) + SHAP explainability.
- Metaheuristic solvers (PSO, Differential Evolution, Genetic & Ant Colony).
- Sub-15ms ONNX/FastAPI serving, drift monitoring & local POPIA open-weight LLMs.

02. Quantitative Feasibility Studies & Simulation

Bankable, falsifiable stress-testing before committing capital to new ventures or sites.

- 10,000+ iteration Monte Carlo stochastic risk & cash-flow survival modeling.
- Agent-Based Modeling (ABM) & SimPy discrete-event line/queue bottleneck simulation.
- Huff Gravity Model spatial catchment, drive-time isochrones & cannibalization.
- 3-statement financial & TCO models + bankable DFI/lender Go/No-Go packs.

03. Workflow Automation & The Growth Stack

Eliminate manual admin busywork and establish a verified enterprise digital foundation.

- Event-driven workflow orchestration (n8n, Celery, Redis) & OCR invoice sync.
- Automated SA payment reconciliations (PayFast, Ozow, Yoco, Peach, Stripe).
- Brand Book, Digital Signature Seal & Interactive AcroForm PDF Contract/Letterhead Suite.
- Google/Zoho Workspace + hardened MX, SPF, DKIM, DMARC & SSO/LDAP governance.

04. Cross-Platform Flutter Apps & Cloud Platforms

Build and scale resilient native applications and high-concurrency backend systems.

- Single Dart codebase for 60fps iOS, Android, Web & Desktop apps with offline sync.
- High-concurrency Python 3.14 (FastAPI), Go & Rust microservices (REST, gRPC, Kafka).
- PostgreSQL 16 ACID ledgers, DuckDB/Polars analytics & sub-ms Redis 7 caching.
- Rootless Podman, Docker & Kubernetes with OpenTelemetry, Prometheus & Grafana.

Institutional Engineering Pedigree & Uncompromising Guarantees:
Founded and directed by senior engineering leaders with track records at Amazon Web Services (AWS), BMW IT Hub, and First National Bank (FNB Fintech). Every build includes fixed-price milestone certainty, Agile Give-Get scope swapping, 100% IP transfer, and a 90-day free warranty.

Schedule an Executive Discovery Call

Direct engineer-to-engineer scoping with zero sales fluff. Fixed-price milestones & 90-day free warranty.

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