



◆ **LEAD AI ENGINEER**
Founder · Archi Cam AI

CONTACT & PROFILES

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📄 Google Developer Program

AI & LLM STACK

Google Antigravity IDE ■■■■■
LangGraph & WikiSkills ■■■■■
Google Gemma 4 (12B) ■■■■■
Gemini 2.5 / 1.5 Pro ■■■■■
Google TabFM (Tabular) ■■■■■
Firebase Genkit ■■■■■
Neo4j GraphRAG — Agent K1

DATA & GRAPHS

Neo4j / Cypher Graph ■■■■■
PostgreSQL / pgvector ■■■■■
Google BigQuery ■■■■■
Supabase Realtime ■■■■■
Pandas / NumPy ETL ■■■■■

DEV & MLOPS

Python 3.11+ / MLOps ■■■■■
FastAPI / Next.js 14 ■■■■■
MLflow & Data Drift ■■■■■
SHAP Sentinel Audit ■■■■■
Docker & Streamlit ■■■■■
IfcOpenShell (5D BIM) ■■■■■

ETHICS, SECURITY & AUDIT

◆ AI Ethics & Anti-Hallucination
◆ Quorum 4-Eyes Governance
◆ OKF v0.2 SHA-256 No-LLM
◆ EU AI Act Compliance (RSASSA)
◆ AVSEC (ICAO Annex 17)

LANGUAGES

French — Native / Fluent
English — Functional basics (tools & doc.)

KEY ASSETS

◆ Dual Competence: AI & Civil Eng.
◆ Aviation Security & Crisis (CCAA)
◆ Mathematical Rigor & Guardrails

KOA MARIE GERVAIS NELLY

Lead AI Engineer & Data Architect | Founder @ Archi Cam AI

◆ EXECUTIVE SUMMARY

Lead AI Engineer & Data Architect (Google Developer Program Member), leveraging Google Antigravity to design neuro-symbolic multi-agent architectures, Neo4j GraphRAG, and sovereign MLOps pipelines. Expert in AI ethics: SHAP transparency, EU AI Act compliance, and deterministic zero-hallucination models. Founder & Architect of Archi Cam AI (Agentic AI SaaS & 5D BIM), bridging civil engineering methodology, mathematical rigor, and product vision.

◆ FLAGSHIP AI PROJECTS

Archi Cam AI — *Agentic AI SaaS & 5D BIM*

- ▶ Sovereign 5D BIM & BOQ estimation platform engineered with Google Antigravity (Gemma 4 12B, Gemini 2.5, BAEI 91).
- ▶ Automated Excel BOQs in <45s (−99.2% time, MLflow $R^2=0.9872$) and 3D renders via Imagen 3 + ControlNet.
- ▶ IfcOpenShell integration for 5D BIM models: automated costing & scheduling via LangGraph agents.

K1-MATHINFO (v3.0.0) — *Sovereign Multi-Agent AI, WikiSkills & OKF Certification*

- ▶ Sovereign DMI system (Univ. of Ngaoundéré): 470 theses, 19 M1 projects, 1,366 Neo4j nodes.
- ▶ 6 LangGraph agents orchestrated via WikiSkills (critic anti-hallucination, Cypher optimizer), RRF k=60, SHA-256 No-LLM (100%).

Sovereign.BI Agentic — *Enterprise Security & Agentic BI*

- ▶ NL-to-SQL/Graph engine (PostgreSQL pgvector, Neo4j N10S, <5s latency) with ABAC guardrails + SHAP Sentinel.
- ▶ Interactive executive dashboards via Streamlit & FastAPI — deployed on sovereign Docker cloud.

Dataset Automator & VigieSahel — *MLOps Pipeline & Climate AI Impact*

- ▶ Dataset Automator: Google Antigravity (Google Cloud Hackathon) — TabFM, BigQuery DataFrames, EU AI Act.
- ▶ VigieSahel: −35% crop loss, +14d epidemic forecast (XGBoost $R^2>94\%$, Supabase, MLflow).

◆ PROFESSIONAL EXPERIENCE

AI Lead & Data Science Consultant — *March 2026 – Present*

Independent Projects & Enterprises | Douala, CM

- ▶ Ethical sovereign AI systems: GraphRAG Neo4j pipelines, high-dimensional EDA, multi-source RAG architectures.
- ▶ Executive decision reporting, automated KPI dashboards, and SHAP explainability audits for African SMEs.

Aviation Security Officer (AVSEC) — *2018 – Present*

CCAA — Cameroon Civil Aviation Authority | Douala, CM

- ▶ Threat assessment, secure access control, and regulatory compliance audits (ICAO Annex 17).
- ▶ Operational crisis management: emergency team coordination, anti-intrusion protocols.

◆ EDUCATION & CERTIFICATIONS

M.Sc. in Applied Artificial Intelligence — *Dec. 2025 – 2027 [In Progress]*

University of Ngaoundéré | Cameroon

- ▶ ML & Bayesian Statistics, Data Engineering & Neo4j, Computer Vision & Robotics, Ethics & Cybersecurity, Production MLOps.
- ▶ Research project: K1-MATHINFO v3 sovereign system — multi-source agent certified OKF v0.2 (SHA-256 No-LLM).

B.Sc. in Civil Engineering (Building Option) — *2015 – 2016*

ISTDI / IUC Douala | Cameroon

- ▶ Structural calculations (BAEI 91), quantity surveying, construction project management — AI-applied estimation base.

◆ HONORS & APPLIED AI DISTINCTIONS

- ◆ **CCAA Certificate of Excellence & Integrity (2023)** — Awarded by the Director General for outstanding operational performance & ethics.
- ◆ **Google Cloud #AllThingsAgentic Hackathon** — Dataset Automator v4.0 (Google Antigravity, TabFM, BigQuery DataFrames, WIT).
- ◆ **Google Developer Program · Devpost** — Active member — AI open-source contributions, hackathons & sovereign AI architect.