Samuel MATIA

📱 +243 812 741 001
✉ ssamat0020@gmail.com
🌐 samuelmatia.github.io/
in sam-matia-4b051125b
⌂ samuelmatia
🎓 Google Scholar | 🪪 ORCID: 0009-0000-7957-9446

Education

Oct 2025 – Oct 2027	**MSc., Computer Engineering**, *University of Kinshasa*, Kinshasa
Aug 2021 – Sep 2025	**B.Sc., Electrical & Computer Engineering**, *University of Kinshasa*, Kinshasa Graduated **top of class (79%)**. **Bachelor Thesis:** "Enhancing Sentiment-Driven Recommender Systems With LLM-Based Feature Engineering: A Case Study in Drug Review Analysis" (**IEEE Access**), graded **20/20**.
Completed 2020	**Secondary School, Biochemistry**, *Institut Cardinal Malula*, Kinshasa **Valedictorian** (ranked 1st). National Exam: **79%**.

Publications

Journal Articles

2025	**Samuel Matia Kangoni**, Obed Tshimanga Tshipata, Pierre Sedi Nzakuna, Vincenzo Paciello, Jean Gilbert Mbula Mboma, Jean Robert Makulo, Kyandoghere Kyamakya. *Enhancing Sentiment-driven Recommender Systems with LLM-Based Feature Engineering: A Case Study in Drug Review Analysis*. **IEEE Access**, 2025. DOI: 10.1109/ACCESS.2025.3590326.

Conferences

2025	**Samuel Matia Kangoni**, Obed Tshimanga Tshipata, Jean-Gilbert Mbula Mboma, Pierre Sedi Nzakuna, Vincenzo Paciello, Vianney Witesyavwirwa Kambale, Kyandoghere Kyamakya. *Structural Preservation in Efficient Pharmacovigilance Summarization: A Causal Graph-Based Evaluation Framework*. **IEEE AFRICON**, 2025.
2025	Mahmoud Hamed, **Samuel Matia Kangoni**, Asha Choudhary, Kyandoghere Kyamakya. *Large Language Models in Healthcare: Opportunities, Challenges, and Pathways Toward Trustworthy Clinical AI*. Accepted at the **AUTSYS-2025: 17th International Conference on Autonomous Systems**. To appear in **Springer** proceedings.

Book Chapters

2025	**Samuel Matia Kangoni**. *Machine Learning in Malware Analysis*. Chapter 7 in *Mastering Malware Development and Analysis: A Comprehensive Guide to Hybrid Malware Analysis and Virtual Sandboxing*. Editors: Bishwajeet Pandey, Deepak Bhaskar Acharya, Divya B. Published by **Apple Academic Press** (Publication: December 2026). (link) Publisher page (Hard ISBN: 9781779646224; E-Book ISBN: 978-1-77964-623-1).

Research Experience

Oct 2025 – Present	**Research Mentee – BASIRA (Brain And Signal Analysis Research) Lab – Graph Neural Networks for Rising Stars**, *Imperial College London*, Supervisor: Dr. Islem Rekik Selected for a highly competitive international research mentorship. Engaged in advanced research on GNNs with focus on architecture design, explainability, and reproducible machine learning. Collaborating with a global cohort on a publication-oriented project exploring GNN-based representation learning for real-world data.

Professional Experience

Aug 2025 – Present	**Freelance AI Trainer**, *EAZYTraining / EASYCONSULTING*, Remote (France) Designed and delivered online AI/DS courses with hands-on projects and deployment workflows; developed tailored training content on ML, DL, and Generative AI.
Jul 2024 – Mar 2025	**AI Engineer**, *CongoExcelTechnologies*, DR Congo, Built end-to-end *RAG* solutions (vector DBs, web scraping) for custom knowledge systems; integrated third-party APIs/databases; benchmarked LLMs, embeddings, and fine-tuning strategies.

Sep 2024 – Nov 2024	**AI Engineer Intern**, *PathOr Platforms*, Remote (India) Developed task-specific LLM agents (shopping assistance, data analysis, automation); curated large-scale datasets; aligned models to specific intents via embeddings/fine-tuning.
Dec 2023 – Mar 2024	**AI Consultant**, *IA Flex Start*, Remote (France) Integrated LLMs into production apps via custom APIs; conducted end-to-end data preprocessing.

Leadership and Community Engagement

Sep 2024 – Oct 2025	**Country Ambassador (DRC)**, *Zindi Africa* Built and led a 200+ member AI community; organized hackathons and technical workshops to promote DataScience and machine learning.
Aug 2025 – Present	**Active Member**, *Cohere Labs Open Science Community* Engaged in international events, talks, and workshops on AI/NLP; promoting open and collaborative research practices.
Jul 2025 – Jul 2026	**Project Coordinator & Informatics Lab Manager**, *Polytechnic Faculty, University of Kinshasa* Managed lab/server infrastructure; mentored student projects in AI/CS.
Jul 2023 – Jul 2024	**Co-lead**, *Google Developer Students Club – University of Kinshasa* Coordinated technical events/workshops; mentored students in software development and AI.

Awards and Distinctions

2024	**Hackathon TechPoly 2024 – First Prize**. *Mat.IA*: multilingual tutor web app combining computer vision, LLM dialogue, and TTS.
2024	**Huawei Seeds for the Future** – Selected as one of 10 students to represent DR Congo in the ICT flagship program.
2023	**Orange Summer Challenge 2023 – Second Prize**. Built the "Utulivu" autism screening system (robot + wearable + app); deployed object detection on Raspberry Pi; created a hybrid recommender system.

Skills

Concepts	Machine Learning, Deep Learning, NLP, Recommender Systems, Computer Vision, Reinforcement Learning, Web Development
Frameworks	PyTorch, TensorFlow, NumPy, LangChain, LangGraph, HuggingFace, scikit-learn, OpenCV, Pandas, Matplotlib, Streamlit, Django
Programming	Python, JavaScript, MATLAB, Git, Linux, Docker, HTML/CSS
Research	Problem Solving, Experimentation, LaTeX
Cloud	AWS, GCP

Languages

French, Lingala, Kikongo – Native proficiency | **English** – Professional working proficiency