**LEBEDE NGARTERA**

**AI Strategist | Machine Learning Engineer | Data Scientist**   
Upper Darby, PA | +1 (267) 961 1931 | **ngarteralebede12@gmail.com**  
[LinkedIn](https://www.linkedin.com/in/lebede-ngartera-82429343) | [GitHub](https://github.com/Teraces12)

**PROFESSIONAL SUMMARY**

Ph.D. in Applied Mathematics with 7+ years of experience engineering scalable deep learning systems and distributed ML infrastructure. Expert in **PyTorch (5+ yrs)**, **Python (7+ yrs)**, and large-scale data pipelines. Proven record designing, optimizing, and deploying ML frameworks for research and production (**93.1% accuracy, 44.8% improvement, 300× optimization**). Published **9+ peer-reviewed papers**. Dedicated to translating cutting-edge research into reproducible, production-ready solutions.

**CORE SKILLS & EXPERIENCE**

* Languages & Frameworks: Python, PyTorch, TensorFlow, C/C++, R, SQL
* ML & AI Engineering: Distributed ML training, deep learning infrastructure, algorithm optimization
* Data & Systems: Large-scale data pipelines, PyTorch DataLoader optimization, reproducible research systems
* Cloud & DevOps: Azure, AWS, GCP, Docker, Git, REST APIs, serverless deployment
* Evaluation & Experimentation: F1, BLEU, ROUGE, ROC-AUC, A/B testing, statistical validation

**PROFESSIONAL EXPERIENCE**

**Senior ML Engineer & AI Researcher** | TeraSystemsAI, Independent Research | 2019 – Present

* Engineered scalable PyTorch-based ML systems for production deployment; custom training loops, optimization techniques, 300x speedup
* Architected large-scale data pipelines and PyTorch DataLoader strategies; processed enterprise-scale documents (200-300 pages)
* Built and open-sourced reproducible research code; Bayesian RAG platform: 93.1% accuracy, 44.8% improvement over baseline
* Implemented ML algorithms, A/B testing frameworks, statistical validation (F1, BLEU, ROUGE); 9+ peer-reviewed publications

**Data Scientist & Assistant Lecturer** | University of N'djamena | 2013 – 2018

* Designed and implemented ML models for forecasting and quantitative analysis.
* Taught **AI, Machine Learning, and Statistics**; mentored graduate research projects.
* Published foundational studies in applied mathematics, statistics, and computational learning.

**EDUCATION & CERTIFICATIONS**

Ph.D. in Applied Mathematics, Cheikh Anta Diop University of Dakar (Analysis, Statistics & Applications)

**Certifications:**

* AWS SageMaker ML Engineer
* IBM Data Science Specialization
* DeepLearning.AI, Natural Language Processing

**KEY ACHIEVEMENTS**

* Achieved 93.1% model accuracy, 44.8% improvement, and 300× optimization in production systems.
* Authored 9+ peer-reviewed publications (IEEE Access 2025, Frontiers 2025, AI/ML conferences).
* Built open-source reproducible ML frameworks supporting scalable research-to-production workflows.
* Engineered distributed ML infrastructure with 99.9% uptime and optimized large-scale dataset pipelines.

***Ready to bring expertise in Bayesian RAG, uncertainty quantification, and full-stack AI development to transform your organization's AI capabilities.***