

Arthur Cartel Foahom Gouabou

Lead AI Engineer · PhD in AI | Computer Vision · Generative AI · MLOps

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AI PhD and Lead AI Engineer, I lead AI and agentic solutions end to end, from architecture to production, in regulated healthcare: medical computer vision, LLM agents, document extraction and MLOps. Four years of medical imaging research and three years in industry, with one common thread: turning a scientifically validated prototype into a reliable, adopted and compliant service (GDPR, EU AI Act).

11

scientific publications, incl. JAAD, IJMS, Sensors

+10 %

operational efficiency from AI in production

100+

learners trained in MLOps

Professional experience

Sep 2025 – present	Lead AI Engineer · DermaScan Paris (remote) - End-to-end lead of AI and agentic solutions in healthcare: tech stack, architecture and engineering standards (deployment, security, data access). - Recruited and managed external developers; code and design reviews; business needs turned into delivery plans. - Deployed the first AI dermatology triage model (images and clinical metadata, validated with dermatologists) across 6 centres: 10,000+ patients and 100,000+ lesions analysed since April 2026. LLM-based AI agents (tool use, multi-step reasoning) automating operational and administrative tasks; OCR + LLM pipelines (PDF reports → database) freeing up medical secretaries' time. - Full-stack internal apps (Next.js, APIs, SSO, LLM gateway) on AWS, Vercel and self-hosted Docker, monitored with Datadog. Industrial supervisor of a CIFRE PhD with the LIS lab (Aix-Marseille University); health data governance for models and analytics (Metabase). - GDPR, EU AI Act and medical software requirements built in by design; documentation towards CE marking (MDR, class IIa); board-level reporting and internal AI training.
Aug 2023 – Aug 2025	AI Researcher, Senior Data Scientist · DMSLOG.ai (formerly DMS Logistics) Marseille - Led AI solutions for container logistics: +10% operational efficiency. Generative AI (RAG) engine: LangChain, Hugging Face and a vector store to query CO2 indicators in natural language. OCR + LLM pipeline extracting structured data from scanned documents. Time-series forecasting modules embedded in the SaaS platform to anticipate logistics KPIs. - Containerised FastAPI services (Docker, Kubernetes, Airflow) deployed on Scaleway; 2 papers at KES 2024.
Sep 2022 – Aug 2023	Temporary Lecturer and Researcher (ATER) · Institut Fresnel and Faculty of Science, AMU Marseille - Research in computer vision and medical imaging: 2D/3D segmentation, object detection. 192 teaching hours from first year to Master's: programming, software engineering, embedded systems, databases, signal processing, deep learning. - Supervised Master's interns (generative models, explainable AI).
Oct 2019 – Aug 2023	Computer Vision Researcher · LIS lab, Aix-Marseille University Marseille Melanoma detection models (CNNs, attention, ensembles) robust to class imbalance and image artefacts. - Image segmentation and multimodal fusion for early diagnosis, in collaboration with dermatologists. - ANR project DIAMELEX (€514k; LIS, CRCM, Anapix Medical): 5 publications from this work.
Apr 2019 – Sep 2019	AI and Computer Vision Intern · LIS (AMU) Marseille Skin cancer diagnosis prototype: SVM, MLP, CNN, dimensionality reduction (PCA, RFE).

Teaching and training

Feb 2025 – Aug 2025	Trainer and course designer (freelance) · Alphorm Remote End-to-end design and production of an MLOps course followed by 100+ learners (see the course).
Jan 2025 – present	Data Science & ML Mentor (freelance) · OpenClassrooms Remote Mentoring Data Scientist (Master's level) students: modelling, MLOps, vision, NLP, RAG, LLMs.
Oct 2024 – present	Adjunct lecturer, SQL databases · IUT, Aix-Marseille University
Oct 2019 – Aug 2022	Teaching assistant (64 h/yr) · IUT, Aix-Marseille University

Skills

AI & ML	Deep learning, computer vision (classification, segmentation, detection), time series, NLP ; PyTorch, TensorFlow, scikit-learn
Generative AI	LLM, AI agents (tool use), RAG , LangChain, Hugging Face Transformers, FAISS, OCR + LLM extraction
MLOps	FastAPI, Docker , Kubernetes, Airflow, CI/CD (GitHub Actions), Datadog, Prometheus, Grafana
Data & cloud	Python, SQL, TypeScript, Next.js, MongoDB, Metabase, AWS, Vercel, Scaleway
Health & compliance	Health data, GDPR, EU AI Act, medical software certification
Soft skills	Project management, technical leadership, scientific writing, science communication
Languages	French (native) · English (B2, professional) · Ghomala'

Education

2019 – 2023	PhD in Computer Science · Aix-Marseille Université Marseille Deep learning for melanoma diagnosis support · presentation video
2018 – 2019	MSc in Vehicle Engineering and Mechatronics · ENSISA, Mulhouse First-class honours, ranked first in class
2012 – 2017	Mechatronics Engineering Degree · ENSP Douala

Publications

2024	A. C. Foahom Gouabou et al. Forecasting Empty Container Availability for Vehicle Booking System Application. <i>KES 2024</i> .
2024	F. Hakimi, T. Khaled, M. Al-Kharaz, A. C. Foahom Gouabou , K. Amzil. Towards a Digital Twin Modeling Method for Container Terminal Port. <i>KES 2024</i> .
2024	J. Monnier, A. C. Foahom Gouabou , M. Serdi et al. Automated melanoma detection. An algorithm inspired from human intelligence characterizing disordered pattern of melanocytic lesions improving a convolutional neural network. <i>Journal of the American Academy of Dermatology</i> .
2022	A. C. Foahom Gouabou et al. Computer Aided Diagnosis of Melanoma Using Deep Neural Networks and Game Theory: Application on Dermoscopic Images of Skin Lesions. <i>International Journal of Molecular Sciences</i> , 23(22).
2022	A. C. Foahom Gouabou et al. End-to-End Decoupled Training for Long-Tailed Classification Applied on Skin Lesion Classification from Dermoscopic Images. <i>Electronics</i> , 11(20).
2022	A. C. Foahom Gouabou et al. Rethinking Decoupled Training with Bag of Tricks for Long-Tailed Recognition. <i>DICTA 2022</i> , Sydney (oral presentation).
2022	J. Monnier, A. C. Foahom Gouabou , M. Serdi et al. Automated detection of melanoma: comparing a CNN approach with an algorithm assessing disorder in the pattern of pigmented lesions. <i>ESMO Congress</i> .
2022	A. C. Foahom Gouabou et al. HMLoss : une nouvelle fonction de coût robuste au déséquilibre de classe. <i>GRETSI 2022</i> , Nancy (poster).
2021	A. C. Foahom Gouabou et al. Ensemble Method of Convolutional Neural Networks with Directed Acyclic Graph Using Dermoscopic Images: Melanoma Detection Application. <i>Sensors</i> , 21(12).
2021	J. Monnier, A. C. Foahom Gouabou , M. Serdi et al. Détection automatique du mélanome : comparaison d'un algorithme fondé sur l'aspect désordonné des lésions mélanocytaires avec une approche CNN. <i>Annales de Dermatologie et de Vénéréologie – FMC</i> .
2020	J. Monnier, A. C. Foahom Gouabou , C. Gaudy-Marqueste et al. Impact d'un artefact fréquent sur la détection automatique du mélanome à partir d'images dermoscopiques. <i>Annales de Dermatologie et de Vénéréologie</i> , 147(12).

Supervision

Ongoing	Industrial supervisor of a CIFRE PhD (DermaScan and LIS lab, Aix-Marseille University) on AI for dermatology.
2023	MSc internship, University of Strasbourg: deep learning detection and reduction of outliers in medical images.
2022	MSc internship, École Centrale de Marseille: skin cancer image segmentation with convolutional neural networks.