

Warith HARCHAOU
deraison.ai
warith.harchaoui@deraison.ai
linkedin.com/in/warith-harchaoui

Ph.D. in Applied Mathematics

AI, Computer Vision, Audio
and Natural Language Processing



I am a Data Scientist and AI expert with 10+ years spanning applied research, industrial R&D, and entrepreneurial delivery. I hold a Ph.D. in Applied Mathematics focused on GenAI and I specialize in taking state-of-the-art methods (LLMs, vision, audio, multimodal, agentic) from experiment to production with clear business impact.

Experience

2025 - Today

NEXTON

Head of AI

Business and scientific leadership of the AI department, serving CAC40 and SBF120 clients, while sustaining high-value R&D initiatives for startups. End-to-end ownership of AI strategy, from tendering to production, including team creation and management

Responsibilities and Achievements

- Define and lead the AI strategy across Data Science, Generative AI, and Agentic AI
- Structure and manage a new AI team (delivery, methodology, best practices)
- Act as senior AI advisor for enterprise clients and internal stakeholders
- Establish an end-to-end AI delivery framework covering ideation, PoC, and industrialization
- Enable enterprise adoption of Generative and Agentic AI through tailored workshops and prototypes
- Build reusable methodological assets to accelerate client projects
- Deploy agentic AI workflows using prompt-based orchestration (MCP)
- Define API and data documentation standards to improve agent reliability and interpretability
- Write "Cracking AI Interviews" oral exams for recruitment in AI

Tools

AI workshops, needs analysis frameworks, Python, LLM, RAG & Agents, MCP, Ollama, OpenRouter, DeepEval, Giskard

2021 - Today

deraison.ai

Founder

Boutique in AI: Speaker and Builder

Clients: Ircam Amplify, VizioSense, glasspop, Volpi Group, Cogity, 3bricks, Pianokees

Fields: medical sector, finance, music industry, knowledge capital, media and embedded computer vision 2D/3D

Close partnerships include:

- teaching at the [Rennes School of Business MBA](#) "Enterprise AI"
- Open Source AI with [:probabl](#), the scikit-learn company consulting services

[Several conferences including at Institut Henri Poincaré](#)

Author at top 5 statistics scientific journal [Royal Statistical Society 2023](#)

Responsibilities and Achievements

- Lead end-to-end AI engagements from problem framing to production delivery
- Design and deploy DS / ML / GenAI systems for diverse industries
- Advise executives and technical teams on AI strategy and adoption
- Build educational and open-source initiatives around responsible AI

Tools

Python, scikit-learn, PyTorch, LLM APIs, MCP, prompt-based workflows, FastAPI, Docker, nenchmarking AI frameworks, custom KPIs

2021 - 2024

Jellysmack, Artificial Intelligence Lab

Research Fellow

Applied research and industrial deployment of multimodal AI systems for large-scale video analysis, retrieval, and generative editing. Work conducted at the intersection of research, product, and internal consulting

Author at top 5 AI scientific conference [Neurips 2022](#)

Responsibilities and Achievements

- Lead research-to-production initiatives in multimodal AI for video understanding and editing
- Design AI systems combining vision, audio, text, and metadata for large-scale retrieval
- Support multiple ML teams beyond GenAI (time series, representation learning)
- Act as internal AI consultant across product, research, and engineering teams
- Contribute to scientific research and external visibility of the AI Lab
- Design and deployed multimodal video retrieval systems used at scale by media experts and external stakeholders
- Enable creator scouting and content discovery through mixed-feature retrieval pipelines
- Apply state-of-the-art benchmarking and evaluation strategies to improve reliability of retrieval and generation systems
- Reduce uncertainty and hallucinations in LLM-based and non-LLM pipelines for video analysis

Tools

Python (PyTorch, scikit-learn, CV/NLP stacks), retrieval, embeddings, Docker, CI/CD on GitHub, LLM orchestration, streamlit/gradio frontends for PoC demos

2014 - 2020

Oscaro.com, R&D

Data Scientist

R&D projects in production include:

- [Credit card fraud detection](#)
- [AI Conferences at École 42 and Institut Henri Poincaré](#)

Operational responsibilities and research investigations while funding my Ph.D.

Responsibilities and Achievements

- Run rigorous and autonomous experimentation with strong engineering discipline (versioning, reproducibility, infra) for C-Levels Analytics
- Run of the first French Credit Card Fraud Systems with an Deep Learning over €1M daily revenue
- Demand forecasting at scale for over 500k products sold online and warehouse/logistics optimization

Tools

Python (scikit-learn, PyTorch), data pipelines, forecasting toolkits; infra docker and MLFlow automation; experimentation frameworks

Education

2016 - 2020

Université Paris Cité, MAP5

[Ph.D. in Applied Mathematics \(Generative Artificial Intelligence\)](#)

Supervised by Pr. Charles Bouveyron

GPU and Infrastructure: system admin with the introduction of the first GPUs in the lab

[Young Statisticians and Probabilists 2018 - Machine Learning and Neural Networks](#)

[Favorite AI Resources](#)

2007 - 2008

École Normale Supérieure de Cachan, MVA

M.Sc. in Mathematics, Computer Vision and Machine Learning

With Honors

Skills

Languages English (fluent), French (mother tongue)

Sciences Applied Mathematics, AI, Machine Learning, Numerical Optimization, Natural Language Processing, Computer Vision, Audio and Signal Processing, Distributed and GPU Computing

Leisure

Lyrical Singing (10+ years of practice), Acting (5+ years of practice)