

WILLIAM PEOCH

Lyon, France · william.peoch@insa-lyon.fr · +33666189377
williampeoch.me · [GitHub](#) · [LinkedIn](#)

Research interests: medical AI, representation learning, multimodal learning, foundation models for biomedical data.

EDUCATION

INSA Lyon – National Institute of Applied Sciences MSc in Bioinformatics and Modeling	Lyon, France Sep 2024 – Jun 2027
City University of Hong Kong – Department of Mathematics Exchange semester – Mathematics & Machine Learning	Hong Kong SAR Sep 2025 – Jan 2026
University Institute of Technology of Reims (URCA) Bachelor in Computer Science	Reims, France Sep 2022 – Jun 2024

RESEARCH EXPERIENCE

INRIA (National Institute for Research in Digital Science and Technology) <i>Machine Learning Research Intern</i>	Lyon, France Jun 2025 – Aug 2025
<ul style="list-style-type: none">Fine-tuned transformer-based models (BERT, LLMs) for biomedical text classification tasks.Built NER pipelines to extract therapeutic targets from biomedical and clinical literature.Collected, cleaned, and curated large-scale biomedical datasets for downstream analysis.Autonomous use of advanced HPC infrastructure (Grid'5000) for training ML models.	
Axon' Cable (Medical Division) <i>Machine Learning Intern</i>	Reims, France Apr 2024 – Jun 2024
<ul style="list-style-type: none">Developed deep-learning models from scratch (CNN & U-Net) to detect and segment diabetic-retinopathy lesions on retinal fundus images.Boosted lesion classification accuracy to 86% by applying advanced image preprocessing across diverse retinal datasets.Built and integrated the entire ML pipeline into a C# application now used by ophthalmologists.Added a RAG module to provide contextual information and improve diagnostic.	

AWARDS & COMPETITIONS

Mistral AI × Alan Hackathon - 1st Place Built an AI medical assistant with image diagnostics and voice/chat interface; won 1st prize out of 150+ participants and Best Pitch Award.
Paris Bio × AI Hackathon Fine-tuned Pixtral-12B on chest X-ray datasets to build a medical report generation system.
LLM × Law Hackathon Developed an IP-focused paralegal RAG system using LLM.
Mistral Paris Hackathon Fine-tuned Mistral-7B to generate ASCII art.

TECHNICAL SKILLS

Machine Learning:	Deep learning, Transformers, LLMs & fine-tuning, Computer Vision, Generative models
Mathematics:	Linear algebra, Probability theory, Statistics, Optimization
Bioinformatics:	Genomics, Transcriptomics, NGS, RNA-seq, Sequence alignment
Software:	Python, R, TypeScript, C#, Docker, Git, Linux
Tools:	PyTorch, TensorFlow, HuggingFace, NumPy, SciPy, scikit-learn, pandas

LANGUAGES

French (native)
English (fluent, C1 – TOEIC 900/990)
Spanish (intermediate, B1)
Chinese (elementary, A2)