

Killian Renard

AI Engineer | Data Scientist
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Professional Summary

AI Engineer specializing in the design and deployment of high-assurance, privacy-centric AI systems for secure environments. Proficient in architecting local Retrieval-Augmented Generation (RAG) and document intelligence pipelines that operate within air-gapped or on-premises infrastructures to ensure absolute data sovereignty. Skilled in leveraging Vision-Language Models (VLM) and modular microservices to automate complex intelligence workflows without compromising the integrity of sensitive information.

Professional Experience

- AI Engineering Intern, Naval Group, Ollioules, France** Mar 2026 to Aug 2026
- Architected and deployed a sovereign, air-gapped document intelligence pipeline converting PDF/DOCX/PPTX to Markdown and structured JSON using OCR, TOC extraction, image metadata indexing, and local VLM-based image descriptions—zero external API calls.
 - Built a modular microservices stack (3-container) on an immutable OS with rootless Podman, internal registries, and offline model caching to satisfy classified-environment constraints and ensure data sovereignty.
 - Designed plug-and-play generation modes using ABC and Factory patterns to simplify onboarding of new formats and downstream consumers.
 - Optimized local VLM inference for factual image description on constrained GPUs by tuning temperature, token limits, and reasoning steps to increase inference reliability and efficiency.
 - Integrated the pipeline with an LLM-powered PPTX and quiz generator, enabling multi-format input and conversational slide editing for automated knowledge product creation.
- QA Test Project, Accenture, Nantes, France** Sept 2025 to Feb 2026
- Conducted comparative analysis of AI-driven test generation solutions (Browserstack, Katalon)
 - Defined evaluation criteria for functional and technical documentation, focusing on Selenium/Appium automation
- Process Optimization Intern, Le Chaînon Charentais, Cognac, France** May 2024 to Aug 2024
- Audited workstations and created visual tool references to improve operator workflow speed, reducing assembly line slowdowns by 30%
 - Collaborated with cross-functional teams to identify and resolve workflow bottlenecks.
- Data Science Intern, SDIS 49 (Fire & Rescue Service), Angers, France** Jul 2023 to Aug 2023
- Developed probabilistic and statistical models to forecast emergency solicitation patterns, successfully reducing labor costs by avoiding over-staffing
 - Utilized Excel to optimize daily operational firefighter deployment by 30%, ensuring efficient resource allocation for a region of 1 million residents.

Project Experience

- Detecting Anomalous Cybersecurity Events Using LSTM Autoencoders - Capstone Project, Pensacola, Florida** May 2025 to Aug 2025
- Built and optimized an LSTM auto-encoder for anomaly detection on the BETH dataset (8M+ process-level events), achieving 99% accuracy and 0.95 F1-score
 - Engineered a temporal feature pipeline with sliding windows and evaluated performance using Precision, Recall, ROC-AUC, and reconstruction error analysis

Technical Proficiencies

Languages:	Python, R, SQL, SAS
AI/ML:	PyTorch, TensorFlow, Keras, Scikit-learn, LangChain, LangGraph, Computer Vision (OCR), Supervised/Unsupervised Learning
LLM/VLM:	LM Studio, Ollama, vLLM, OpenWebUI, RAG Pipelines, Prompt Engineering
Infrastructure:	Docker, Podman (rootless), FastAPI, Flask, Git, PostgreSQL, Air-Gapped Deployment
Data & Vizualisation:	Pandas, NumPy, Matplotlib, Seaborn

Education

- Polytech Angers, Angers, France** Sept 2022 to Aug 2026
Master of Engineering – ME, Reliability and QA
- University of West Florida, Pensacola, Florida** Aug 2024 to Aug 2025
Master of Science - MS, Data Science - Analytics and Modeling
Graduate Teaching Assistant with GPA 4.0. Assessed exams and supported undergraduate Statistics courses
- University of Pau and the Adour Region, Pau, France** Sept 2019 to Aug 2022
Bachelor of Science – BS, Mathematics

Languages and Hobbies

Languages : English C1, French Native

Hobbies : Competitive swimmer at French national level, Hiking, Traveling