

TRISTAN LECOURTOIS

+33 767220870 ◇ Paris, France

tristanlecourtois4@gmail.com ◇ [linkedin.com/tristan-lecourtois](https://www.linkedin.com/in/tristan-lecourtois) ◇ <https://tristanlecourtois.github.io>

EDUCATION

Master of Computer Science, Mines de Saint-Etienne, France Sept 2023

Ranked among the top 10 French prestigious engineering schools for academic excellence.

- Computer Science (Machine Learning, Python, C, C++, algorithmics, SQL)
- Mathematics, physics and chemistry
- Management, leadership and entrepreneurship

French "Classes Préparatoires", Lycée Pierre Corneille, Rouen Sept 2021

- Rigorous multidisciplinary cursus, academic excellence, solving complex problems, preparation for top french prestigious engineering schools.

EXPERIENCE

Visiting Student Researcher April 2025 - August 2025
NASA Jet Propulsion Laboratory *Los Angeles, CA*

- Advanced embodied AI by extending [ROSA](#), a language-enabled agent powered by LLMs and vLLMs for natural language control of robots via a reasoning-action-observation loop.
- Prototyped semantic and episodic memory systems to enhance contextual recall and self-optimization
- Integrated new robotic actions on NeBula-SPOT and JPL's Open Source Rover

Machine Learning Research Scientist Intern Summer 2024
Airbus *Paris, France*

- 18% reduction in machine maintenance time using Python scripts to anticipate quality drifts in the aircraft electronic board manufacturing workshop.
- Improved quality control with a JavaScript/SQL monitoring table to track failures.

LLM Research Intern Jan 2024
Atos *Aix-en-Provence, France*

- Training a text2SQL model with Langchain and Ollama for query generation to achieve a 90% execution accuracy
- Explored open-source Foundation models and employed HuggingFace's transformers for NLP tasks
- Developement of Retrieval-Augmented Generation (RAG) enabling conversational interactions with documents.

SELECTED PROJECTS

AI Therapist Agent Developed during the [UC Berkeley Cal Hacks 2025](#), this project leverages NLP and conversational AI, using Vapi for voice interaction, to create an empathetic virtual therapist prototype focused on mental health support ([Link](#))

ML-based Self-Diagnostic Tool for Endometriosis Advanced endometriosis diagnosis through a streamlined model, achieving an F1-score of 0.92 and accelerated diagnosis via a concise set of 24 symptoms, utilizing an 800-example dataset. ([GitHub Link](#))

SKILLS

Python, PyTorch, TensorFlow, scikit-learn, Docker, ROS2, LoRA, Arima, C/C++, SQL, Chroma