

Research Engineer in Artificial Intelligence with a strong background in Machine Learning and Software Development. I'm particularly interested in Reinforcement Learning, Large Language Models, Multi-Agent Systems and Open-Endedness.

EXPERIENCE

<b>Huawei</b>	Paris, France
<b>Research Engineer</b>	Mar 2025 - Present
<ul style="list-style-type: none"><li>Research on LLMs, Automated Data Science and RL, supervised by Balázs Kégl at Paris Noah's Ark Lab.</li><li>Developed a tabular data preprocessing pipeline combining LLM-assisted and heuristic feature engineering, as well as feature selection methods to enhance the performance of an internal AutoML tool (Scikit-Learn, Pandas).</li><li>Conducted early-stage Reinforcement Learning research on bilevel optimization and LLM fine-tuning for code (Jax, TRL).</li><li>Contributed to two NeurIPS workshop papers on LLMs applications: hyperparameters generation and multi-agent debate [1].</li></ul>	
<b>Inria</b>	Bordeaux, France
<b>Research Engineer</b>	Dec 2023 - Jan 2025
<ul style="list-style-type: none"><li>Research on AI and Multi-agent systems, supervised by Clément Moulin Frier at Flowers Lab.</li><li>Co-developed the Open-Source LLM-Culture software to simulate and analyze text evolution across generations in populations of LLMs [3]. Built NLP (SpaCy, NLTK) and data visualization tools to evaluate text properties, as well as a web interface (Flask).</li><li>Contributed to a paper (ICLR 2025) studying evolution of text properties in multi-turn LLM interactions [2].</li><li>Co-Developed a Vivarium, a multi-agent simulator built in Jax for AI research and teaching, achieving real-time interaction with Web or Jupyter notebook clients. Supervised an intern and used the simulator in a Master's course at UPF Barcelona.</li></ul>	
<b>Research Scientist Intern</b>	May 2023 - Nov 2023
<ul style="list-style-type: none"><li>Research on Meta-Reinforcement Learning, supervised by Clément Moulin Frier and Xavier Hinaut at Flowers Lab.</li><li>Developed ER-MRL, a method optimizing RNNs with Evolutionary Strategies, in order to improve Deep RL agents' ability to solve partially observable tasks and adapt faster to unseen environments [4] (Sb3, Gym, Optuna).</li><li>Created a tutorial for parallelized hyper parameter search in the open source ReservoirPy library (500+ stars).</li></ul>	
<b>Connectiv-IT</b>	Bordeaux, France
<b>Data Scientist Intern</b>	May 2022 - Aug 2022
<ul style="list-style-type: none"><li>Preprocessed helicopter maintenance data, performing cleaning, outlier detection and imputation (Pandas, Scikit-Learn). Used statistical analysis (SciPy) and clustering to identify key trends in maintenance data.</li></ul>	

SELECTED PUBLICATIONS Complete publications list

- [1] *Optimizing for Persuasion Improves LLM Generalization*: Reedi, A J., **Léger, C.**, Pourcel, J., Gaven, L., Charriau, P., Pourcel, G. (2025). MTI-LLM workshop @ NeurIPS 2025
- [2] *When LLMs Play the Telephone Game*: Perez, J., Kovač, G., **Léger, C.**, Colas, C., Molinaro, G., Derex, M., Oudeyer, P. Y., Moulin-Frier, C. (2025). ICLR 2025
- [3] *Cultural evolution in populations of Large Language Models*: Perez, J., **Léger, C.**, Ovando-Tellez, M., Foulon, C., Dussauld, J., Oudeyer, P. Y., Moulin-Frier, C. (2024). Arxiv
- [4] *Evolving Reservoirs for Meta Reinforcement Learning*: **\*Léger, C.**, \*Hamon, G., Nisioti, E., Hinaut, X., Moulin-Frier, C. (2024). EvoAPPs 2024 (Long Talk)
- [5] *Early Empirical Results on Reinforcement Symbolic Learning*: Radji, W., **Léger, C.**, Bardisbanian, L. (2023). HAL Inria

SELECTED PROJECTS

- Open Source Contributions**: Fixed several issues in Stable-Baselines3 RL library (10k+ stars). Contributed to KanRL, helped creating this app to interpret RL policies, and benchmarked PPO and Policy Gradient algorithms with KANs.

EDUCATION

<b>Ecole Nationale Supérieure de Cognitique (ENSC)</b>	Bordeaux, France
<b>Master of Science in Computer and Cognitive Sciences</b>	Sept. 2020 – Sept. 2023
<i>Activities: Bronze medal at French University Volley-Ball Championship 2023</i>	
<b>Cycle Préparatoire de Bordeaux (CPBx)</b>	Bordeaux, France
<b>Bachelor of Science in Mathematics and Physics, Sport-Study contract with ASI Volley-ball</b>	Sept. 2018 – Jun. 2020

SKILLS

- Programming**: Python, Git, Linux, Web Development, Cloud Computing
- Python Frameworks**: Jax, Numpy, PyTorch, Scikit Learn, Optuna, Hydra, Pandas, Flask, Gym