

Alice Lacan, Ph.D.



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Professional Experience

CBIO Mines Paris – PSL & Institut Curie <i>Junior AI Fellow Researcher</i>	Paris, France 2026 –
CBIO Mines Paris – PSL & Institut Curie <i>Postdoctoral Researcher</i> Supervisor: Eloïse Berson.	Paris, France 2025 – 2026
NPCo (ex-Augur), Inria Start-Up Studio <i>AI Engineer for Numerical Simulations</i> Start-up founders: Emmanuel Menier and Matthieu Nastorg.	Saclay, France 2024 (5 months)
IBISC / Inria, Univ. Paris-Saclay <i>PhD in Computer Science</i> Thesis title: Transcriptomics data generation with deep generative models. Supervisors: Blaise Hanczar and Michele Sebag.	Saclay, France 2021 – 2024
Inria <i>Research Internship on Forecasting and Controlling the Covid-19 Pandemic</i> Supervisors: Isabelle Guyon and Michele Sebag.	Saclay, France 2021 (6 months)
Dexia <i>Credit Risk Model Validation Intern</i>	Courbevoie, France 2020 (6 months)
Cosmostat, CEA <i>Research Internship in Deep Learning for Binary Galaxy Images Classification</i> link	Saclay, France 2019 (6 months)
Blue Pie Production <i>Internship in Content and Data Management</i>	Sydney, Australia 2018 (3 months)

Education

Univ. Paris-Saclay <i>PhD in Computer Science</i>	Saclay, France 2021 – 2024
Univ. Paris-Saclay <i>Master 2 Artificial Intelligence, With high honors</i>	Saclay, France 2020 – 2021
Univ. Paris 1 – Panthéon Sorbonne <i>Master 1 Econometrics and Statistics, With high honors</i>	Paris, France 2018 – 2019
Univ. Paris 1 – Panthéon Sorbonne <i>Bachelor in Economics, With honors</i>	Paris, France 2015 – 2018
Lycée Louis Le Grand <i>Scientific High School Diploma, With high honors</i>	Paris, France 2015

Research Publications

In Preparation.....
A. Lacan, E. Berson, “Sparse multi-landmark supervision for longitudinal EHR survival prediction,” *Submitted*, 2026.

N. Aghaeepour, A. Lacan, ..., E. Berson et al., "Foundation model-guided cohort optimization enables robust and efficient biomedical discovery," *Submitted*, 2026.

Journal Articles.....

A. Lacan, R. André, M. Sebag, and B. Hanczar, "In silico generation of gene expression profiles using diffusion models," *BMC Bioinformatics*, vol. 27, no. 1, May 2026, ISSN: 1471-2105.  DOI: 10.1186/s12859-026-06470-8.

A. Lacan, M. Sebag, and B. Hanczar, "GAN-based data augmentation for transcriptomics: survey and comparative assessment," *Bioinformatics*, vol. 39, no. Supplement_1, pp. i111-i120, Jun. 2023, ISSN: 1367-4811.  DOI: 10.1093/bioinformatics/btad239.

S. Farrens, A. Lacan, A. Guinot, and A. Z. Vitorelli, "Deep transfer learning for blended source identification in galaxy survey data," *Astronomy & Astrophysics*, vol. 657, A98, Jan. 2022, ISSN: 1432-0746.  DOI: 10.1051/0004-6361/202141166.

Conferences.....

A. Alsamadi, A. Lacan, B. Hanczar, and M. Sebag, "Identifying GANs blind spots in transcriptomic data generation," in *Junior Conference on Data Science and Engineering (JDSE)*, 2024.

A. Lacan, B. Hanczar, and M. Sebag, "Frugal generative modeling for tabular data," in *Proceedings of European Conference in Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML - PKDD)*, Cham: Springer Nature Switzerland, 2024, pp. 55-72, ISBN: 978-3-031-70371-3.  DOI: 10.1007/978-3-031-70371-3_4.

A. Lacan, M. Sebag, and B. Hanczar, "GAN-based data augmentation for transcriptomics: survey and comparative assessment," in *International Conference on Intelligent Systems for Molecular Biology (ISMB)*, Jun. 2023.  DOI: 10.1093/bioinformatics/btad239.

A. Lacan and I. Guyon, "ML-CI: Machine learning confidence intervals for covid-19 forecasts," in *BayLearn - Machine Learning Symposium*, 2021.  [Online]. Available: <https://hal.science/hal-03501101>.

A. Lacan and I. Guyon, "ML-CI: Machine learning confidence intervals for covid-19 forecasts," in *Junior Conference on Data Science and Engineering (JDSE)*, 2021.

Presentations

2025:

[Talk] Deep Generative Modeling for Transcriptomics, *Seminar (LaBRI, Bordeaux)*.

[Talk] Deep Generative Modeling for Transcriptomics, *Biopuces seminar (INRAE)*. 

[Talk] Deep Generative Modeling for Transcriptomics, *Département de Génétique (INRAE)*.

2024:

[Talk] Frugal Generative Modeling for Tabular Data, *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)*.

[Poster] Frugal Generative Modeling for Tabular Data, *PhD Days STIC – Univ. Paris-Saclay*.

2023:

[Talk] Deep Generative Modelling for Transcriptomics, *PhD Days UDOPIA – Centrale Supélec*.

[Talk] GAN-based Data Augmentation for Transcriptomics, *International Conference on Intelligent Systems for Molecular Biology (ISMB)*. 

2022:

[Invited Talk] ML-CI: Machine Learning Confidence Intervals for Covid-19 Forecasts, *Women In Data Science (WIDS) – Guayaquil*. 

2021:

[Talk] Knowledge-Aware Data Augmentation for Transcriptomics, *PhD Days UDOPIA – Centrale Supélec*.

[Talk] ML-CI: Machine Learning Confidence Intervals for Covid-19 Forecasts, *Junior Conference on Data Science and Engineering (JDSE)*. 

[Poster] ML-CI: Machine Learning Confidence Intervals for Covid-19 Forecasts, *BayLearn – Machine Learning Symposium*. [Video](#) 

Teaching Experience

Université Paris Sciences & Lettres (PSL)	Paris, France
Lecture and practical sessions - <i>Introductory Statistics</i> [21h, 1st year Bachelor of Science in AI (IBSAI)]	2027
Université Paris Sciences & Lettres (PSL)	Paris, France
Lecture and practical sessions - <i>Advanced Statistics</i> [21h, 2nd year Bachelor of Science in AI (IBSAI)]	2026
Université Paris Sciences & Lettres (PSL)	Paris, France
Teaching Assistant - <i>Linear Algebra</i> [42h, 1st year Bachelor of Science in AI (IBSAI)]	2026
Dassault Systèmes	Villacoublay, France
Teaching Assistant - <i>Fundamentals in Machine Learning</i> [30h, Mines PSL Exed]	2026
Université d'Évry	Évry, France
Teaching Assistant - <i>Deep Learning</i> [15h, Master 2 Computer and Network Systems]	2023 – 2024
École Nationale Supérieure d'Informatique pour l'Industrie et l'Entreprise (ENSIIE)	Évry, France
Teaching Assistant - <i>Machine Learning</i> [10h, Master 1 Computer Science]	2023 – 2024
Université d'Évry	Évry, France
Mentoring - <i>Deep Learning Projects</i> [7h, Master 2 Computer and Network Systems]	2022 – 2023
Université d'Évry	Évry, France
Teaching Assistant - <i>Deep Learning</i> [15h, Master 2 Computer and Network Systems]	2022 – 2023
École Nationale Supérieure d'Informatique pour l'Industrie et l'Entreprise (ENSIIE)	Évry, France
Teaching Assistant - <i>Machine Learning</i> [10h, Master 1 Computer Science]	2022 – 2023
Laboratoire de Mathématiques	Orsay, France
Teaching Assistant - <i>Mathematics</i> [64h, Bachelor Economics]	2021

Skills

Coding: Python • SQL • MATLAB • Unix/Bash • $\text{\LaTeX}$ • Multi-GPU • SLURM • Office Pack

Languages: French - native • English - fluent (TOEFL iBT 108) • Spanish - interm. • Mandarin Chinese - beginner

Other: Academic research, teaching, $\text{\LaTeX}$ typesetting and publishing.

Miscellaneous

Awards & Achievements.....

2026: PR[AI]RIE AI Fellowship Grant for 3 years – Competitive grant from Paris school of AI (PSAI) - PR[AI]RIE for junior and senior postdoctoral fellowship funding.

2021: UDOPIA and Labex Digicosme Grant – Competitive grants for PhD funding.

Supervision.....

2025-2026: One doctoral student (co-supervised).

2023-2024: Two MSc interns (co-supervised).

Academic Service.....

Reviewer: *Briefings in Bioinformatics*, *ICML*, *ICANN*.

2024: Scientific workshop moderator, *International Day for Women*, Univ. Évry.

2024: Interview, Portraits of female PhD students. [Video](#) 

2022: Main organizer, chair, reviews & sponsors coordinator, *NewInML Workshop @ ICML*. [Link](#) 

2021: Organizer and chair, *UDOPIA PhD Days*. [Link](#) 

Machine Learning Challenges.....

2021: Sartorius Kaggle Challenge – Instance segmentation on brain cells.

2020: XPRIZE Pandemic Response Challenge – Covid-19 forecasting (finalist).

2018: KPMG Fake News Challenge - Ranked 6th.

Interests.....

Video editing, flying drones, theatre, cinema, travelling, sports (swimming & running), volunteering (teaching and collecting funds in Arusha, Tanzania in 2020), English teacher at Momji (France) from 2015 to 2020.