JAROD LÉVY

PhD Student in AI × Neuroscience

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in LinkedIn G GitHub G Scholar





EXPERIENCE

PhD Student

Meta AI (FAIR) & INRIA

- 📋 Jan 2025 Jan 2028
- Paris
- Decoding communication through non-invasive brain signals.
- · Supervision: Stéphane d'Ascoli, Thomas Moreau, Jean-Rémi King.

Al Research Intern

Meta AI (FAIR) - Brain & AI Team

- May 2024 Nov 2024
- Paris
- Built brain-to-text models to better decode and understand the brain.
- Supervision: Stéphane d'Ascoli & Jean-Rémi King.

Research Intern

Dan Landau Lab (New York Genome Center & WCM)

- Feb 2023 Jul 2023
- New York
- · Built deep learning models to detect somatic mutations in mRNA sequences.

Project Manager

Institut du Sein

- Sep 2022 Dec 2022
- Paris
- Designed data-extraction workflow to optimize publication pipelines.

Machine Learning Consultant

Avatar Medical & Institut Pasteur

- Apr 2022 Dec 2022
- Paris
- Developed segmentation algorithms for 3D medical imaging.
- · Built annotation platforms and self-supervised learning pipelines for neuroscience datasets.
- · Supervisor: Jean-Baptiste Masson.

Research Intern

Institut Pasteur - Perception & Memory Unit

- **☐** Jan 2021 Jun 2021
- Paris
- Experimental & computational work on amygdala neural circuits.
- Supervisors: Lena Bourhy & Gabriel Lepousez.

EDUCATION

M.Sc. — Mathematics, Vision & Learning (MVA)

École Normale Supérieure Paris-Saclay

1 2023 – 2024

M.Sc. — Cycle Ingénieur Civil

École des Mines de Paris

1 2021 – 2024

M.Sc. Biomedical Engineering (Exchange)

Imperial College London

1 2019 – 2020

B.Sc. Life Sciences Engineering

EPFL Lausanne

- **1** 2017 2019
- First class honours (top 10%).

Classes Préparatoires PCSI

Lycée Henri IV, Paris

2016 - 2017

SKILLS

Programming: Python C#/C++ JavaScript CSS HTML

PyTorch Tools: Unix Git Slurm

Docker

Others: Computational Neuroscience

Experimental work Team management **Event organization**

French (native)



English (fluent)



Spanish (B2)



PUBLICATIONS

For a complete and up-to-date list, visit my Google Scholar profile <a>Z .

LEAD PUBLICATIONS

- **J. Lévy**, M. Zhang, S. Pinet, J. Rapin, H. Banville, S. d'Ascoli, J.-R. King (2025). *Brain-to-text decoding: A non-invasive approach via typing.* **Under review.**
- Media coverage: BBC Radio, MIT Technology Review, Forbes, France Info...
- **J. Lévy**, H.-J. Banville, J.-R. King, S. Pinet, J. Rapin, S. d'Ascoli, T. Moreau (2025). *Deep Learning on M/EEG signals: adapt your model, not your preprocessing!* **GRETSI.**

COLLABORATIONS

- M. Zhang, **J. Lévy**, S. d'Ascoli, J. Rapin, F. Alario, P. Bourdillon, S. Pinet, J.-R. King (2025). *From thought to action: How a hierarchy of neural dynamics supports language production.* **Under Review.**
- C. Raynaud, D. Wu, J. Lévy, M. Marengo, J.-E. Bibault (2025). *Patients facing large language models in oncology: A narrative review.* JCO Clinical Cancer Informatics.
- L. Bourhy, A. Mazeraud, L.H.A. Costa, **J. Lévy**, D. Rei, E. Hecquet, I. Gabanyi, F.A. Bozza, F. Chrétien, P.-M. Lledo, T. Sharshar, G. Lepousez (2022). *Silencing of amygdala circuits during sepsis prevents the development of anxiety-related behaviours.* **Brain.**
- L. Bourhy, C. Moigneu, A. Dupin, E. Hecquet, **J. Lévy**, T. Sharshar, P.-M. Lledo, G. Lepousez (2023). *Dissecting the contribution of vagal subcircuits in sepsis-induced brain dysfunctions.* **Under Review.**

OTHER WORKS

- J. Lévy, C. Godard, J.-B. Masson (2022). Towards robust fetus segmentation from MRI imaging.
- J. Lévy, P. Meddeb (2023). From trees to continuous embeddings and back: Hyperbolic hierarchical clustering.
- J. Lévy (2022). Few-shot learning creates predictive models of drug response.
- J. Lévy, P. Meddeb (2023). QRT Data Challenge: Can you guess the winner?

INVITED TALKS

INVITED TALKS in 2025

- Adapt your model, not your preprocessing GRETSI, Strasbourg
- Decoding communication using non-invasive brain recordings Institut Pasteur, Paris
- Brain2Qwerty architecture Meta FAIR MechInterp Group, London

INVITED TALKS in 2024

• Brain-to-text architectures — FAIR Conference Workshop, New York

INVITED TALKS in 2022

 Presentation of the DIVA platform — Cancer Symposium, Institut Pasteur, Paris

INVITED TALKS in 2019

What are optical illusions? — National Health Fair, Geneva

COMMUNITY SERVICE



Reviewer — ICLR and NeurIPS From 2024.



Teacher Assistant — Mathematics 100 students — exercise sessions and tutorials.



Vice-President — EPFL Life Sciences Association

Organized academic & cultural events for 200+ students.



Delegate to Faculty Board

Represented Life Sciences students (2017–2019).

OUTSIDE WORK



Winner — Question pour un Champion

France 3, March 2025.



President — Chambre Noire

Collective promoting emerging artists through immersive events (1000+ people).



Weekly column "PhD Diary" on LinkedIn and Substack (3K+ followers).



Volunteer Work

 $Louvre\ Museum-Patronage\ and\ Accessibility\ Department, assisting\ visitors\ with\ disabilities.$



Sports

Tennis (2 h/week), Chess (ELO 1600).



Music

- Electronic music producer and performer (Paris, London, Lausanne).
- · Piano (15 years).