# **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</a> .

#### **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).