



LIANA AKOBIAN

lianaak.github.io
lianaakopian@gmail.com
Austrian

**computational neuroscience - neural networks - neuroAI - machine learning -
dynamical systems - modeling**

ACADEMIC EXPERIENCE

ÉCOLE NORMALE SUPÉRIEURE | RESEARCH INTERNSHIP

2025-

Group for Neural Theory. PI: Professor Alex Cayco-Gajic

Validation of a Schur Reordering Algorithm for finding interpretable representations within connectivity matrices of recurrent neural networks.

UNIVERSITY OF VIENNA | MASTER THESIS

2023-2025

Zimmer Lab. PI: Professor Manuel Zimmer

To study the neural dynamics underlying *C. elegans* locomotion, I aligned 23 Calcium imaging recordings and built a 'canonical' neural manifold with PCA. I extended decomposed linear dynamical systems (dLDS) to disentangle intrinsic neural dynamics and control signals on the manifold

UNIVERSITY OF VIENNA | RESEARCH INTERNSHIP

2022

Zimmer Lab. PI: Professor Manuel Zimmer

Using methods from functional data analysis, such as FPLSR, I identified individual neurons and time ranges from *C. elegans* Calcium imaging data that are highly predictive of aversive behavior upon elevated oxygen levels

UNIVERSITY OF VIENNA | BACHELOR THESIS

2020

Neuroinformatics Lab. PI: Professor Moritz Grosse-Wentrup

Review and analytical comparison of frequency-based models (e.g. Bag of Words) and prediction-based models (Long Short-Term Memory) for computing Semantic Text Similarity.

REFERENCES

Professor Alex Cayco-Gajic (École Normale Supérieure, Group for Neural Theory)

Professor Manuel Zimmer (University of Vienna)

Dr. Charles Fieseler (University of Vienna)

EDUCATION

TU Vienna | Master of Science in Data Science

2025

KU Leuven | Erasmus Term in Artificial Intelligence

2023

University of Vienna | Bachelor of Science in Computer Science

2021

SKILLS

Programming: Python (advanced), Java, R, C++

Frameworks: Docker, Ansible, Spark

Libraries: PyTorch, Tensorflow, sklearn

Other: Wandb (for MLOps), Latex

Languages: German (native), English (fluent, C2 level), Armenian

NON-ACADEMIC EXPERIENCE

GOOGLE DEVELOPER GROUP CO-ORGANIZER

2024-2025

Co-organised Austria's biggest GDG chapter, including events and meetups related to Machine Learning and AI.

TU WIEN | BIG DATA ENGINEER

2021-2023

Managed and tuned a big data cluster that was provided to academic and industrial researchers and helped them parallelize their programs for distributed processing. Also held courses and workshops about big data handling and processing. Automated cluster configurations using orchestration tools like Ansible.

SAP | HR TECHNOLOGY WORKING STUDENT

2018-2020

Managed innovative technological projects such as Chatbots based on AI and knowledge-based systems for HR.