

## RESEARCH INTERESTS

My research interests are computer vision, signal processing and generative AI. I am also interested in applications to medicine such as neurosciences.

## EDUCATION

2023 - 2024	<b>M.Sc. in mathematics and artificial intelligence, MVA</b>	ENS Paris-Saclay, France
	Coursework: convex optimization, probabilistic graphical models and deep generative models, computational optimal transport, machine learning for time series, geometric data analysis, introduction to numerical imaging, bayesian machine learning, kernel methods, algorithms for speech and natural language processing, mathematics for neurosciences, deep learning for medical imaging, generative models for images	
2022 - 2023	<b>Research Year in Artificial Intelligence</b>	ENS Paris-Saclay, France
	Coursework: foundations of AI, AI for images and videos, AI for natural language processing, AI for time series, object recognition and computer vision (MVA) and image denoising (MVA)	
2021 - 2022	<b>M.Sc. in mathematics and artificial intelligence</b>	Université Paris-Saclay, France
	Coursework: probability, statistics, machine learning, deep learning, natural language processing, algorithms and data structures, graph theory, information theory, mathematics for artificial intelligence, optimization and introduction to image processing	
2018 - 2021	<b>B.Sc. in mathematics and computer science</b>	Université Gustave Eiffel, France
	Top 5% for three consecutive years	

## WORK EXPERIENCE

05/2024 Present	<b>Meta Platforms, FAIR (Facebook Artificial Intelligence Research)</b>	London, United Kingdom
	Internship on M/EEG model pretraining through systematic benchmarking of open datasets under the supervision of Hubert Banville and Jean-Rémi King	
03/2023 Present	<b>New York University, NYU Video Lab</b>	New York City, United States
	Internship on critical regions prediction for language processing from ECoG data under the supervision of Yao Wang and Adeen Flinker	
11/2022 3 months	<b>ENS Paris-Saclay, Centre Borelli, HIA Bégin</b>	Gif-sur-Yvette, France
	Internship on time series analysis from EEGs of patients in intensive care unit under the supervision of Laurent Oudre and Clément Dubost	
04/2022 3 months	<b>ENS Paris-Saclay, Centre Borelli</b>	Gif-sur-Yvette, France
	Internship on image processing and deep convolutional networks under the supervision of Enric Meinhardt-Llopis	

## PUBLICATIONS

2024 <i>In progress</i>	<b>Deep learning models based on neurophysiology to predict language cortex stimulation,</b> <i>A. Ratouchniak, J. Chen, X. Chen, A. Khalilian-Gourtani, Y. Wang, A. Flinker</i>
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## ADDITIONAL EDUCATION

06/2019	<b>Music diploma</b>	France
	Music diploma in piano and music theory obtained with honors	

## SKILLS & INTERESTS

<b>Languages</b>	French (native), English (fluent), Spanish (intermediate), Chinese (basic)
<b>Programming</b>	Java, Python (scikit-learn, PyTorch), Git, MATLAB, C, PHP, JavaScript

**Sport**

Running, Fitness, Judo