

RESEARCH INTERESTS

My research interests are the applications of artificial intelligence to neurosciences, signal processing and computer vision.

EDUCATION

2023 - 2024	M.Sc. in mathematics and artificial intelligence, MVA	ENS Paris-Saclay, France
	Coursework: convex optimization, probabilistic graphical models and deep generative models, machine learning for time series, geometric data analysis, topological data analysis for imaging and machine learning, introduction to numerical imaging, bayesian machine learning, kernel methods in machine learning, algorithms for speech and natural language processing, mathematics for neurosciences, deep learning for medical imaging, deep reinforcement learning	
2022 - 2023	Research Year in Artificial Intelligence	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	M.Sc. in mathematics and artificial intelligence	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.Sc. in mathematics and computer science	Université Gustave Eiffel, France
	Top 5% for three consecutive years	

WORK EXPERIENCE

03/2023 Present	New York University, NYU Video Lab	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	
11/2023 3 months	ENS Paris-Saclay, Centre Borelli, HIA Bégin	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	
04/2023 3 months	ENS Paris-Saclay, Centre Borelli	Gif-sur-Yvette, France
	Internship on image processing and deep convolutional networks under the supervision of Enric Meinhardt-Llopis	
2019 - 2021	Piano teacher	France
	Piano lessons for beginners and intermediate students	

PUBLICATIONS

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

06/2019	Music diploma	Noisiel, France
	Music diploma in piano and music theory obtained with honors	

SKILLS & INTERESTS

Languages	French (native), English (fluent), Spanish (intermediate)
Programming	Java, Python (scikit-learn, PyTorch), C, PHP, JavaScript, Git, MATLAB
Sport	Running, Fitness, Judo

