# **K** https://antoinertk.github.io/

## ANTOINE RATOUCHNIAK

### antoinertk@meta.com

#### **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, 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 **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
Top 5% for three consecutive years

Université Gustave Eiffel, France

### **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	New York University, NYU Video Lab Internship on critical regions prediction for language processing from supervision of Yao Wang and Adeen Flinker	ew York City, United States om ECoG data under the
11/2023 3 months	ENS Paris-Saclay, Centre Borelli, HIA Bégin Internship on time series analysis from EEGs of patients in intersupervision of Laurent Oudre and Clément Dubost	Gif-sur-Yvette, France sive care unit under the
04/2023 3 months	ENS Paris-Saclay, Centre Borelli Internship on image processing and deep convolutional networks und Meinhardt-Llopis	Gif-sur-Yvette, France er the supervision of Enric

### **PUBLICATIONS**

Deep learning models based on neurophysiology to predict language cortex stimulation, In progress A. Ratouchniak, J. Chen, X. Chen, A. Khalilian-Gourtani, Y. Wang, A. Flinker

### **ADDITIONAL EDUCATION**

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

## **SKILLS & INTERESTS**

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

**Sport** Running, Fitness, Judo