# ANTOINE RATOUCHNIAK http

https://antoinertk.github.io/

#### 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** Université Gustave Eiffel, France Top 5% for three consecutive years

### **WORK EXPERIENCE**

| 05/2024<br>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<br>Present  | New York University, NYU Video Lab Internship on critical regions prediction for language process supervision of Yao Wang and Adeen Flinker   | New York City, United States ing from ECoG data under the |
| 11/2022<br>3 months | <b>ENS Paris-Saclay, Centre Borelli, HIA Bégin</b> Internship on time series analysis from EEGs of patients in intensive care unit under the supervision of Laurent Oudre and Clément Dubost  |   |
| 04/2022<br>3 months | ENS Paris-Saclay, Centre Borelli Internship on image processing and deep convolutional network Meinhardt-Llopis   | Gif-sur-Yvette, France as under 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