# https://antoinertk.github.io/

# ANTOINE RATOUCHNIAK

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#### **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

ENS Paris-Saclay, France 2022 - 2023 **Research Year in Artificial Intelligence** 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

B.Sc. in mathematics and computer science Université Gustave Eiffel, France 2018 - 2021 Top 5% for three consecutive years

### **WORK EXPERIENCE**

03/2023 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 sing from 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 supervision of Laurent Oudre and Clément Dubost	Gif-sur-Yvette, France n intensive care unit under the
04/2023 3 months	ENS Paris-Saclay, Centre Borelli Internship on image processing and deep convolutional network Meinhardt-Llopis	Gif-sur-Yvette, France ks under the supervision of Enric
2019 - 2021	<b>Piano teacher</b> Piano lessons for beginners and intermediate students	France

# **PUBLICATIONS**

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

# ADDITIONAL EDUCATION

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

# SKILLS & INTERESTS

French (native), English (fluent), Spanish (intermediate) Languages

Programming Java, Python (scikit-learn, PyTorch), C, PHP, JavaScript, Git, MATLAB

**Sport** Running, Fitness, Judo