ANTOINE RATOUCHNIAK

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WORK EXPERIENCE

05/2024 Present	Meta Platforms, FAIR (Fundamental AI Research) Internship working on leveraging pre-training across different brain decoding tasks (image, speech and word) within the Brain & AI team supervised by Hubert Jacob Banville and Jean Remi King
03/2023 Present	New York University, NYU Video Lab Working on critical regions prediction for language processing from ECoG data under the supervision of Yao Wang and Adeen Flinker
11/2022 3 months	ENS Paris-Saclay, Centre Borelli, HIA Bégin Internship on time series analysis from EEGs of patients in intensive care unit under the supervision of Laurent Oudre and Clément Dubost
04/2022 2 months	ENS Paris-Saclay, Centre Borelli Internship on image processing and deep convolutional networks under the supervision of Enric Meinhardt-Llopis

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

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**Music diploma in piano and music theory obtained with honors

France

SKILLS & INTERESTS

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

Sport Running, Fitness, Judo