

Lounes Meddahi

Summary

Passionate about Machine Learning, I am particularly interested in improving learning methods in complex environments. With a strong commitment to research and its applications, I aim to improve and create novel algorithms and techniques that deepen our knowledge of learning processes.

Experience

- 02.2024–08.2024 **Applied Research Intern, Sony AI**, Tokyo, Japan
Full-time Working on heuristics for automatic dish evaluation in Sony's Gastronomy Project.
- 05.2023–11.2023 **Applied Research Intern, InstaDeep**, Paris, France
Full-time Improving RL train scheduling algorithms in collaboration with Deutsche Bahn.
 - Leading the design and development of deep RL algorithm for train scheduling.
 - Pivotal roles at InstaDeep: Contributing to the InstaDeep x BioNTech hackathon, Workshop retreats in Berlin for the CTMS project, Nominated and Elected **AI Expert** for the CTMS initiative.
 - [Authored](#) a research paper to share and present my work.
- 09.2022–04.2023 **Research Assistant, INRIA – EMPENN**, Rennes, France
Part-time Research assistant focused on using deep learning for segmenting strokes in medical imaging.
 - Conducted research on deep learning for brain stroke segmentation.
 - Proposed and developed a novel approach for multi-modality stroke segmentation.
 - [Authored](#) and soon submitted a research paper.
- 06.2022–08.2022 **Research Intern, IMT Nord-Europe – CERI SN**, Villeneuve d'Ascq, France
Full-time Research internship centered on advancing IoT security and scalability using blockchain.
 - Conducted research on blockchain applied to IoT security and scalability.
 - End-to-end development : model design, tests and results of the proposed approach.
 - [Publication](#) of results and selected **Best paper award** at IEEE ISNCC'23.
- 06.2021–07.2021 **Intern, INRIA – Scool**, Villeneuve d'Ascq, France
Full-time Discovery internship in research and Reinforcement Learning.
 - Reading and implementation of different RL algorithms from the scientific literature.
 - [Interpretation and in-depth study](#) of the algorithms; Source code shared in open source.

Education

- 09.2022–09.2025 **M.Sc. in Computer Science (Track "Normalien")**, *ENS Rennes*, Rennes, France
Master's degrees in computer science and mathematics from France's top scientific school.
- 09.2019–06.2022 **B.Sc. in Mathematics and Computer Science**, *University of Lille*, Lille, France
Graduated Summa Cum Laude.

Publications

- [2] **MM-STROKEnet: A new Approach for Stroke Lesion Segmentation Using multi MRI Modalities**
[Lounes Meddahi](#), Francesca Galassi, Stéphanie Leplaideur, Elise Bannier and Arthur Masson, Soon to be submitted, 2023
- [1] **[Best paper award] Leveraging blockchain for a robust and scalable device identification in LoRaWAN**
[Lounes Meddahi](#), Ahmed Meddahi, Patrick Sondi and Fen Zhou, 10th International Symposium on Networks, Computers and Communications (ISNCC'23), **Best paper award**, top 4 out of 404, 2023

Skills and Interests

- Languages French (Native speaker), English (Proficient: TOEIC C1 and IELTS C1)
- Relevant Courses Reinforcement Learning, Deep Learning, Game Theory, Computer Graphics. [Details.](#)
- Programming Python, C, Java
- Interests Machine Learning, Programming, Epistemology