

YOUWAN MAHÉ

I am a PhD student at INRIA/IRISA (Rennes) in the Empenn Team.
I use deep learning to detect and segment anomalies in chronic stroke patients.

CONTACT



✉ youwan.mahe@inria.fr
☎ +33 (0)6 85 48 41 01
📍 Rennes, FRANCE
in Youwan MAHÉ

SKILLS

Programming

Python 
C 
L^AT_EX 
LabVIEW 

Operating systems

Linux 
Windows 

Other softwares

Scilab/Matlab 
OriginLab 
MS Office 

Languages

- French (native)
- English (C1)
- Spanish (A1)

DIPLOMAS AND CERTIFICATIONS

- Bachelor in engineering sciences
- 2 year degree in PHYSICAL MEASUREMENTS "Chemical engineering and applied physics"
- French A-Level "Baccalauréat Scientifique"
- LinguaSkill C1
- Aeronautics initiation certificate
- Driving licence
- Sailplane pilot licence
- Light aircraft maintenance licence

WORK EXPERIENCE

📅 Jan-Jun 2024
📍 Empenn (Inria/Irisa) in Rennes (FR) **Master Internship**

Segmentation of multiple sclerosis lesions in the spinal cord

📅 Summer 2023
📍 The European Synchrotron (ESRF) in Grenoble(FR) **Research Internship**

Multi-modal X-ray data analysis of brain tissue

📅 2022-2023
📍 LMGP in Grenoble(FR) **Part-time research project**

Formation and release of hybrid insulin-peptide aggregates from hydrophobic surfaces

📅 April-june 2021
📍 ENS Chemistry Laboratory in Lyon(FR) **12 week-long Internship**

Programming and automation of a two-photon fluorescence spectroscopic experiment

EDUCATION

📅 2022 - 2024
📍 INP-PHELMA, Grenoble **Master's degree in Nanomedicine and structural biology**

📅 2022 - 2024
📍 INP-PHELMA, Grenoble **Master's degree in Biomedical Engineering**

📅 2023
📍 Université Grenoble-Alpes **European School on Nanosciences and Nanotechnologies (ESONN)**

📅 2019 - 2021
📍 University of Rennes 1, Lannion **2 year undergraduate degree in Physical-Measurements**

RECENT PROJECTS

🔧 **Segmentation of multiple sclerosis lesions in the spinal cord**
Using a longitudinal dataset of magnetic resonance images of the spinal cord, I have compared the performance of convolutional and transformer-based segmentation models for cross-sectional and longitudinal lesion segmentation.

DL *Image processing*

🔧 **Multi-modal X-ray data analysis of brain tissue**
Using the ID16A beamline at the European Synchrotron (Grenoble), I have implemented tissue segmentation solutions (K-Means, U-NET, Random-Forest) for data measured at ID16A (nano holotomography) and ID13 (Small Angle X-ray scattering).

ML *Image processing*