

**STUDIES** 

# Master's Degree in Medical Imaging and Applications MAIA

**1** 2022 - 2024

uB-France / UdG-Spain / UNICAS-Italy

 Specialized in medical image analysis and CAD systems using advanced machine learning and deep learning algorithms

#### Bachelor's Degree in Computer Science

**University of Burgundy** 

**1** 2019 - 2022

Dijon, France

## Electronic Engineering (5 semesters)

**UNEXPO** 

**1** 2017 - 2019

Guayana, Venezuela

### **EXPERIENCES**

#### Master's Thesis - Brain structure prediction

#### Hjerneavbildning / fMRI-gruppa

**Ö** 02/2024 - 06/2024

NTNU, Trondheim Norway

 Predicting structural brain changes 9 years ahead in T1w MR images using Deformation Fields and GANs based techniques.

#### Internship - Brain tumor detection

#### **ImViA Laboratory**

Summer 2023

Dijon, France

 Detection of brain tumors using multi-spectral imaging from MRI and Dempster-Shafer theory.

#### Internship - Skin lesion imaging

#### **FORTHEM alliance**

Summer 2022

Dijon-France / Mainz-Germany

Development of a system for managing multi-modal images of skin lesions.
 Enable the integration of AI for the detection of melanomas.

#### Research Engineer

#### **DNUM - University of Burgundy**

**1** 2021 - 2023

Dijon-France

• Facilitate information sessions for staff on the operation of electronic equipment and platforms dedicated to education and management.

#### **AWARDS**

AgustinCartaya

- Scholarship Grant Erasmus Mundus Joint Master.
- Winner of the melanoma classification problem MAIA CAD module.
- Poster Presenter, Brain Aging Conference 2024, Geiranger, Norway.

# CHALLENGES AND PROJECTS

- Alzheimer's disease onset recognition by handwriting.
- Alzheimer's disease classification using MRIs and gene expression.
- Multi-modal brain MRI segmentation.
- Intra patient lung CT registration.
- Skin lesion classification (binary and multi-class).
- Soft Exudates detection and classification in retinal fundus images.

# **SKILLS**

#### **Programming**

Python Java

TensorFlow / PyTorch

C++ MATLAB

Linux

SQL

Freesurfer

OpenGL

#### Soft skills

Autonomy

Teamwork

Adaptability

Problem-Solving

Perseverance

# **LANGUAGES**

English Spanish

French

Italian

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#### Student Jobs

**2017 - 2023** 

- Waiter and Student advisor CROUS Dijon, France
- Grape picker Domaine Latour Giraud, Meursault, France
- Bartender Stand Buy, France
- Baker JJ Bakery, Guayana, Venezuela