



PHD STUDENT
MEDICAL IMAGE
PROCESSING

LUCIE CHALET

Get in touch

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ABOUT ME



MRI technologies and image processing enthusiast
Committed for the environment, adventurous and challenge seeker
Keen on languages and international travel and work experiences

EDUCATION


MASTER OF SCIENCE - 2021
Microsystems, instrumentation
and robotics - 3d vision major
University of Franche Comté [FR]

ENGINEERING DEGREE - 2021
Biomedical engineering - e-
health major - Superior Inst.
for Biomedical Engineering [FR]

ERASMUS - 2018
International technical degree
in mechanical engineer
Riga Technical University [LV]

TECHNICAL DEGREE - 2017
Mechanical engineering and
automated manufacturing
Technical Uni. St.Etienne [FR]

IT - SKILLS

 Frequently used packages
python ["pandas", "pydicom", "monai",
"simpleITK", "skimage"]

Other software and languages
{ "languages": ["java", "R"],
"software": ["matlab", "imagej",
"itk-snap", "medseg", "3Dslicer"] }

LANGUAGES

ENGLISH Fluent [TOEIC 980]

FRENCH Mother tongue

GERMAN Basic commands [A2]

SPANISH Basic commands [A2]

REFERENCES

TIMOTHE BOUTELIER
Scientific Expert, Olea Medical
timothe.boutelier@olea-medical.com

DR. GERD LEITINGER
Assoc. Prof., Med. Uni. Graz
gerd.leitinger@medunigraz.at

EXPERIENCE

MEDICAL IMAGE PROCESSING - PHD STUDENT

Olea Medical | CarMeN lab., IRIS team | Oct 2021 -> 2024 [FR]

- Validation of brain oxygen metabolism mapping in pre-clinical stroke models using PET-MRI combined modalities
- Development of oxygen mapping algorithm optimized for clinical emergency use.

Chalet L et al. (2022) Clinical Imaging of the Penumbra in Ischemic Stroke: From the Concept to the Era of Mechanical Thrombectomy. *Front. Cardiovasc. Med.* 9:861913. doi: [10.3389/fcvm.2022.861913](https://doi.org/10.3389/fcvm.2022.861913)

BRAIN SEGMENTATION TOOL DEVELOPMENT - R&I INTERN

Olea Medical | Apr 2021 -> Aug 2021 [FR]

- Manual segmentation of brain diffusion weighted imaging
- Development of supervised CNN for automatic brain segmentation using Pytorch-based Monai framework

DYNAMIC FEATURES RECOGNITION - RESEARCH INTERN

Medical University of Graz | Jan 2021 -> Mar 2021 [AT]

- Computer vision-based feature recognition in dynamic scene combined with bio-inspired obstacle detection algorithm
- Prospective study for visually impaired users

3D NEURON RECONSTRUCTION PIPELINE - RESEARCH INTERN

Medical University of Graz | Jan 2020 -> Feb 2020 [AT]

- Semi-automated pre-processing macro development on ImageJ
- Neuron segmentation from electron microscopy acquisition in Amira

HARDWARE DESIGN CT-SCAN USER INTERFACE - R&D ENGINEER

MedPhoton | Summer 2019 and 2020 [AT]

- CAD and quality control in mechanical department
- Design of cover parts and user-interface hardware for CT-scan

PEDAGOGY AND PEOPLE SKILLS

INTERN SUPERVISION

6 months master internship with
introduction to python, mri
images and scientific monitoring

SWIMMING INSTRUCTOR

Swimming lessons to adults and
children from age 3

TEACHING TRAINING

24h training for higher education
teaching and pedagogy strategies
Online MOOC

ENGLISH PROOFREADER

Proofreader for english productions
within IRIS team (CarMeN lab.)