KAOUTHER MOUHEB

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EDUCATION

University of Girona, University of Burgundy, University of Cassino European Union
M.Sc. Medical Imaging and Applications MaIA, **Grade: 9.7/10, Rank 2/27** 2021 - 2023
Erasmus Mundus Joint Master Degree. [Website]

Eskisehir Technical University Eskisehir, Turkey
B.Sc. Computer Engineering, **GPA: 3.99/4, Valedictorian** [Website] 2016 - 2021

National Mathematics High School Mohand Mokhbi Algiers, Algeria
Baccalaureate in Mathematics, **Grade: 18.55/20, Valedictorian** 2013 - 2016

EXPERIENCE

Biomedical Imaging Group Rotterdam, Erasmus MC Rotterdam, Netherlands
PhD Candidate, Researcher Sep 2023 - Aug 2027
• Ph.D. project: Etiological diagnosis of Dementia based on multi-model data using Federated Deep
Learning.

Center For Virtual Imaging Trials, Duke University Durham NC, USA
Visiting Graduate Student Feb 2023 - Aug 2023
• Master's Thesis. Supervised by Dr. Joseph Lo.
• Building the next-generation XCAT computational imaging phantoms. Working on 3D shape
completion and generation using generative deep learning applied to implicit shape representation.

ViCOROB Lab, University of Girona Girona, Spain
Graduate Research Intern Jun 2022 - Aug 2022
• Supervised by Dr. Robert Marti.
• Worked with a research team on Breast Density Estimation from breast mammograms using
Federated Learning.

TUBITAK Software Technologies Research Institute Ankara, Turkey
Candidate Researcher Jan 2021 - Aug 2021
• Project: Expenses Management Systems of the Turkish Ministry of Treasury and Finance.
• Participated as a Full-Stack developer in designing a software system based on the micro-service
architecture following the domain driven design paradigm.

TUBITAK Software Technologies Research Institute Ankara, Turkey
Software Development Intern Jun 2020 - Aug 2020
• Developed an event management system for the institute with a Spring Boot based backend, a
React-based web front-end and a PostgreSQL database.

Dypix Boumerdes, Algeria
Web Development Intern Jun 2019 - Aug 2019
• Developed a web-based interactive educational tool for children using Laravel, MySQL and
Bootstrap.

HONORS AND AWARDS

MICCAI Educational Challenge First Place Winners by MICCAI Student Board (2024)

MaIA Best Student Award by University of Girona (2023)

Federated Learning Breast Density Challenge Winner By Nvidia-ACR-NCI, **MICCAI** (2022)

Datacare AI Santé Datathon Health AI Award by Santenov & partners (2022)

Erasmus Mundus Grant for MaIA joint master degree (23 awardees out of 600 applicants) (2021)

First Class Honors for graduating as valedictorian of the Engineering Faculty of ESTU (2021)

Best Graduation Project by Eskisehir Chamber of Commerce, 14th Graduation Projects Fair (2021)

Erasmus+ Scholarship, an exchange semester at Liepaja University (5 awardees/department) (2020)

High Honors Student for 8 semesters by the dean of ESTU Engineering Faculty (2017-2021)

YTB Turkiye Scholarships for undergraduate studies (5k awardees out of 100k applicants) (2016)

Presidential Honorable Mention for ranking fifth of Algeria in the national BAC exam (2016)

PUBLICATIONS

Mouheb, K., Yürekli A. , Yılmazel, B. **"TRODO: A public vehicle odometers dataset for computer vision."** Data in Brief 38 (2021): 107321.

Mouheb, K. , Yürekli, A. , Dervisbegovic, N. , Mohammed, R. A. , Yılmazel, B. **"EduFERA: A Real-Time Student Facial Emotion Recognition Approach"**. Avrupa Bilim ve Teknoloji Dergisi (2021): 690-695

Mouheb, K., Elbatel M. , Klein, S., Bron E.E. **"Evaluating the Fairness of Neural Collapse in Medical Image Classification"** Medical Image Computing and Computer Assisted Intervention – MICCAI 2024

Schmidt, K., Bearce, B., Chang, K., Coombs, L., Farahani, K., Elbatel, M., **Mouheb, K.**, Marti, R., Zhang, R., Zhang, Y. and Wang, Y **"Fair evaluation of federated learning algorithms for automated breast density classification: The results of the 2022 ACR-NCI-NVIDIA federated learning challenge"** Medical Image Analysis, 95, p.103206.

SKILLS

Programming:	Python, Java, MatLab, R, JavaScript, PHP.
AI & Computer Vision:	PyTorch, Sci-kit Learn, OpenCV, PyTorch Lightning, MONAI.
Web & Mobile Development:	Spring Boot, Laravel, Flask, ReactJS, Bootstrap, Android.
Database Management:	MySQL, SQLite, PostgreSQL, SQL.
Other:	Linux, Git, LaTeX.

CERTIFICATES

Fundamental Neuroscience for Neuroimaging	Coursera (2023)
Deep Learning with Pytorch: GAN	Coursera (2022)
AI Programming with Python Nanodegree	Udacity (2019)
Android Basics Nanodegree by Google	Udacity (2018)

LANGUAGES

Arabic:	Native.
English:	Advanced, IELTS 8.0.
French:	Advanced.
Turkish:	Advanced.
Dutch:	Elementary.