

Abdallah Abouabdallah

Aachen, Germany
[Github](#)

abdallah.abouabdallah@rwth-aachen.de
+49 1573 6126877

Languages & Software: Python, Node.js, MLOps, SQL, vLLM, RAG, Agent systems, Docker, Git, Bash

EDUCATION

FH Aachen University of Applied Sciences <i>Master of Science in Medical Engineering</i>	Aachen, Germany <i>2024 - Present</i>
FH Aachen University of Applied Sciences <i>Bachelor of Engineering in Medical Engineering</i>	Aachen, Germany <i>2020 - 2023</i>
University of Moulay Ismail Meknes <i>Associate's Degree in Medical Engineering</i>	Meknes, Morocco <i>2018 - 2020</i>

EXPERIENCE

Uniklinik RWTH Aachen <i>Research Assistant</i>	Aachen, Germany <i>Oct 2024 - Present</i>
<ul style="list-style-type: none">– Collaborated with clinicians, researchers, and engineers to design predictive algorithms.– Managed huge health-related data from databanks like UKB.– Integrated solutions for analyzing multimodal data.– Implemented ML models and LLMs for various projects.	
Forschungszentrum Jülich <i>Research Assistant (Praktikum)</i>	Jülich, Germany <i>Oct 2022 - Oct 2023</i>
<ul style="list-style-type: none">– Analyzed 3D cellular images from confocal microscopy, focusing on high-precision segmentation.– Applied ML algorithms to classify cellular objects across datasets.– Designed visual reports for interdisciplinary teams, aiding critical decision-making.	
Dott <i>Mechanic (Scooters and E-bikes)</i>	Cologne, Germany <i>Jun 2022 - Aug 2022</i>
<ul style="list-style-type: none">– Repaired E-bikes and Scooters, improving operational efficiency.	
Medicorum GmbH <i>Medical Tester</i>	Cologne, Germany <i>May 2021 - Jun 2021</i>
<ul style="list-style-type: none">– Performed medical tests on patients, ensuring data accuracy in documentation.	

PROJECTS

External modeling pipeline: A portable, compact modeling pipeline for cross laboratory and cross research team model-sharing and external validation. It automatically and easily ships our models and makes them applicable at different sites with minimal setup.
LLM Document Retrieval System: System that answers user questions based on information retrieved directly from document. Web UI built with node.js, React and the LLM (Agent) infrastructure uses vLLM and RAG. Everything built and contained in Docker for easy deployment in different systems.
Liver Tumor Segmentation: Developed an ML model for liver tumor segmentation, leveraging cascaded Res-Attention-UNet for precision in clinical imaging.
ECG Signal Classification: Classified 1016 ECG signals achieving 91% accuracy using TensorFlow.
Web-based UI for ECG Metadata: Created a Flask/SQL-based web UI for managing patient and ECG data.
Interactive ML for Imaging: Conceptualized a web UI to visualize and interact with segmented CT/MRI images, bridging ML and usability.

EXTRACURRICULAR ACTIVITIES

Languages: German (C1), English (fluent), French (fluent), Arabic (fluent) .
Interests: Software development, DevOps, MLOps, Medical imaging, bioinformatics, and machine learning applications.