# Felix J. Dorfner

## EDUCATION

**Harvard Medical School** — Boston, USA
*Graduate Research Student* — Since 09/2023

**Charité Universitätsmedizin Berlin** — Berlin, Germany
*Medical student* — Since 10/2020

**Maristengymnasium Fürstenzell** — Fürstenzell, Germany
*Valedictorian, 1.0 Abitur* — 07/2018 – 07/2020

## RESEARCH EXPERIENCE

**QTIM Lab, Athinoula A. Martinos Center for Biomedical Imaging**
*Research Intern* — Boston, MA, USA
Research in different Image and Language AI applications for Radiology. — Since 09/2023

**Artificial Intelligence in Medicine, Radiology, Charié Universitätsmedizin Berlin**
*Doctoral Candidate* — Berlin, Germany
Thesis: Deep learning for the detection of radiographic sacroiliitis. — since 01/2023

**PHARMACOGENOMICS AND GENOMIC MEDICINE GROUP Lab**
*Intern* — Cape Coast, Ghana
Internship in pharmacogenics for patients with HIV and Malaria co-infections. — 09/2022 – 10/2022

## AWARDS

Scholarship holder of the Friedrich-Wingert-Stiftung — Since 08/2024
Scholarship holder of the Studienstiftung des deutschen Volkes. — Since 02/2021
Scholarship holder of the Congress-Bundestag Youth exchange (study abroad). — 08/2017 – 06/2018

## SKILLS

**Computing:** Python (experienced, including SciPy stack, Pytorch and Monai deep learning frameworks), MATLAB (competent, Signal Processing Toolbox), bash (competent), Linux-based operating systems (competent, including HPC environments), LaTeX, Git
**Languages:** German: Native, English: Fluent (C2), French: Basic (A2)

## PUBLICATIONS

- Lisa C Adams, Daniel Truhn, Felix Busch, **Felix Dorfner**, Jawed Nawabi, Marcus R Makowski, Keno K Bressem, "Llama 3 challenges proprietary state-of-the-art large language models in radiology board–style examination questions". In: *Radiology* 312.2 (2024), e241191.
- Tobias R Bodenmann, Nelson Gil, **Felix J Dorfner**, Mason C Cleveland, Jay B Patel, Shreyas Bhat Brahmavar, Melisa S Guelen, Dagoberto Pulido-Arias, Jayashree Kalpathy-Cramer, Jean-Philippe Thiran, "Multimodal Deep Learning-Based Prediction of Immune Checkpoint Inhibitor Efficacy in Brain Metastases". In: *MICCAI Workshop on Cancer Prevention through Early Detection*. Springer Nature Switzerland Cham. 2024, pp. 37–47.
- **Felix J Dorfner**, Amin Dada, Felix Busch, Marcus R Makowski, Tianyu Han, Daniel Truhn, Jens Kleesiek, Madhumita Sushil, Jacqueline Lammert, Lisa C Adams, "Biomedical Large Languages Models Seem not to be Superior to Generalist Models on Unseen Medical Data". In: *arXiv preprint arXiv:2408.13833* (2024).
- **Felix J Dorfner**, Liv Jürgensen, Leonhard Donle, Fares Al Mohamad, Tobias R Bodenmann, Mason C Cleveland, Felix Busch, Lisa C Adams, James Sato, Thomas Schultz, "Comparing Commercial and Open-Source Large Language Models for Labeling Chest Radiograph Reports". In: *Radiology* 313.1 (2024), e241139.
- **Felix J Dorfner**, Janis L Vahldiek, Leonhard Donle, Andrei Zhukov, Lina Xu, Hartmut Häntze, Marcus R Makowski, Hugo JWL Aerts, Fabian Proft, Valeria Rios Rodriguez, "Anatomy-centred deep learning improves generalisability and progression prediction in radiographic sacroiliitis detection". In: *RMD open* 10.4 (2024), e004628.
- Hartmut Häntze, Lina Xu, Leonhard Donle, **Felix J Dorfner**, Alessa Hering, Lisa C Adams, Keno K Bressem, "Improve Cross-Modality Segmentation by Treating MRI Images as Inverted CT Scans". In: *arXiv preprint arXiv:2405.03713* (2024).

- Hartmut Häntze, Lina Xu, **Felix J Dorfner**, Leonhard Donle, Daniel Truhn, Hugo Aerts, Mathias Prokop, Bram Ginneken, Alessa Hering, Lisa C Adams, "MRSegmentator: Robust Multi-Modality Segmentation of 40 Classes in MRI and CT Sequences". In: *arXiv preprint arXiv:2405.06463* (2024).
- Jameson Merkow, **Felix J Dorfner**, Xiyu Yang, Alexander Ersoy, Giridhar Dasegowda, Mannudeep Kalra, Matthew P Lungren, Christopher P Bridge, Ivan Tarapov, "Scalable Drift Monitoring in Medical Imaging AI". In: *arXiv preprint arXiv:2410.13174* (2024).
- Satvik Tripathi, Jay Patel, Liam Mutter, **Felix J Dorfner**, Christopher P Bridge, Dania Daye, "Large Language Models as an Academic Resource for Radiologists Stepping into Artificial Intelligence Research". In: *Current Problems in Diagnostic Radiology* (2024).