

Mahshad Sarikhani

📍 Tehran, Iran ✉ mahshadsarikhani9696@gmail.com 📞 +989129153610 in Mahshad Sarikhani, MD 🌐 GitHub

Summary

MD radiology researcher in abdominal MRI and multimodal AI. I bridge clinical questions with model design, data curation, and rigorous evaluation for IBD/MRE and related imaging tasks, aiming to translate model gains into decisions that matter in practice.

Clinical Impact Highlights

- **IBD imaging focus:** Magnetic resonance enterography (MRE) for disease activity & motility; collaboration with Motilent (UK).
- **Model development:** Built and evaluated predictive baselines integrating imaging with clinical/lab data; contributed to analysis plans, error review, and manuscript preparation.
- **Team science:** Cross-disciplinary work with radiology and ML collaborators; contributed to a clinical LLM systematic review and co-authored a chapter on AI in cardiovascular imaging.

Education

Shahid Beheshti University of Medical Sciences, Tehran
Doctorate of Medicine (MD)
Full Scholarship Recipient

Feb 2015 – May 2022

Research Experience

Research Associate (Abdominal Imaging and AI)

Jan 2024 – Present

Department of Radiology, Shariati Hospital, Tehran University of Medical Sciences

- Conduct quantitative MRI studies on IBD activity and colonic motility, integrating imaging, clinical, and laboratory data.
- Collaborate with the UK-based Motilent group on MRE motility studies (*ECCO 2025 poster accepted*; second project ongoing).
- Develop predictive models integrating imaging and clinical data; support data analysis, calibration, model evaluation, and manuscript preparation.
- Contributed to a systematic review on large language models in clinical research.
- Co-authored a book chapter on AI applications in cardiovascular imaging.

Research Assistant

Sep 2022 – Dec 2023

Shahid Beheshti University of Medical Sciences

- Worked on abdominal imaging research projects, including data analysis and AI integration.
- Conducted cost-effectiveness modelling for imaging-based diagnostic pathways.
- Collaborated on the PanCanAID research project, focusing on dataset curation and semi-automatic segmentation for pancreatic cancer CT.

Professional Experience

General Practitioner

Aug 2022 – Aug 2024

Valiasr Local Medical Center, Ministry of Health and Education, Alborz

- Diagnosed and managed acute and chronic conditions; coordinated care with imaging and laboratory services; provided preventive counseling.
- Performed physical examinations; ordered and interpreted imaging and lab tests; documented care plans and patient education.

Internship

May 2020 – May 2022

Teaching Hospitals, Shahid Beheshti University of Medical Sciences

- Clinical rotations: internal medicine, general surgery, pediatrics, obstetrics and gynecology, emergency medicine, radiology.
- Performed patient assessments, documented histories, assisted in minor procedures and inpatient care during interdisciplinary rounds under supervision.

Publications

Conference Presentation

Poster (Accepted) — ECCO 2025 Congress

Sarikhani M, Naim I, Torabi A, Amouei M, Vahedi H, Sima AR, Kolahdoozan S, Menys A, Radmard AR. Quantitative assessment of colon motility in ulcerative colitis using magnetic resonance enterography: Correlation with endoscopic disease activity. *European Crohn and Colitis Organization (ECCO) Congress*, Berlin, Germany, February 2025. DOI: [10.1093/ecco-jcc/jjae190.0729](https://doi.org/10.1093/ecco-jcc/jjae190.0729).

Peer-Reviewed Article

Kazemi SM, Khorram R, Fayyazishishavan E, Amani-Beni R, Haririan Y, Hosseini Khameneh SM, Rahmani E, Minaei Noshahr R, **Sarikhani M**, Rahimi R, Saeidi S, Saeidi D, Farrokhi M. Diagnostic accuracy of Ottawa Knee Rule for diagnosis of fracture in patients with knee trauma: A systematic review and meta-analysis. *Archives of Academic Emergency Medicine*. April 2023. DOI: [10.22037/aaem.v11i1.1934](https://doi.org/10.22037/aaem.v11i1.1934).

Preprint

Ghaffarzadeh-Esfahani M, Salahi-Niri A, Toreyhi H, Mohsenzadeh-Kermani A, **Sarikhani M**, Tajabadi Z, Shojaeian F, Bagheri MH, et al. Large language models versus classical machine learning: Performance in COVID-19 mortality prediction using high-dimensional tabular data. *arXiv*. September 2024. DOI: [10.48550/arXiv.2409.02136](https://doi.org/10.48550/arXiv.2409.02136).

Skills

Technical Skills

- Python (NumPy, pandas, scikit-learn; PyTorch, Keras); matplotlib, seaborn; Jupyter, VS Code
- Machine learning & statistics: model development and evaluation (cross-validation, ROC/PR, calibration), logistic regression, tree-based models; statsmodels, GEE
- Medical imaging analytics: abdominal MRI/MRE quantitative analysis; data curation, preprocessing, and result reporting
- NLP for radiology reports: text preprocessing and structured information extraction; basic evaluation against manual labels
- Version control & reproducibility: Git/GitHub, organized project structure and documentation

Medical Skills

- Clinical radiology research in inflammatory bowel disease; interpretation of abdominal MRI/MRE in collaboration with radiologists
- Understanding of radiology workflows and practical integration considerations for AI tools
- General Practitioner training with a foundation in diagnostic and preventive medicine

Research and Communication Skills

- Scientific writing: manuscripts, proposals, and conference abstracts/posters (e.g., ECCO 2025)
- Study design, data analysis, and collaborative work within multidisciplinary teams
- Literature review and evidence synthesis (systematic review on large language models)
- Clear academic communication and presentations; organized reference/note management

References

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