

Mohammad Reza Naderi Boldaji

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[mohammadrezanaderi4.github.io](https://github.com/mohammadrezanaderi4)

Isfahan, Iran

Education

- 2019-22 **M.Sc.**, Electrical Engineering, Isfahan University of Technology, GPA: 3.43
2015-19 **B.Sc.** Electrical Engineering, Shiraz University of Technology, GPA: 3.76

Research Experience

- 2020-24 Research Assistant, HADIP Lab, Isfahan University of Technology
Advisor: [Professor Shadrokh Samavi](#)
Research Topic: Deep Generative Models and Their Application to Various Computer Vision Tasks

Awards & Honors

- 2019 Graduated with the highest GPA among Bachelor's students at Shiraz University of Technology
2019 Honored as the top student at Shiraz University of Technology for excellence in academics and ethical conduct

Publications

 [Google Scholar](#)

† → Equal contribution

Peer-reviewed Journal Articles

- J1. **Naderi[†], Mohammad Reza, Givkashi[†], M., Karimi, N., Shirani, S. & Samavi, S.** SFI-Swin: symmetric face inpainting with swin transformer by distinctly learning face components distributions. *Multimedia Tools and Applications* **1**. <https://doi.org/10.1007/s11042-024-19365-8> (2024).
- J2. Givkashi, M., **Naderi, MohammadReza**, Karimi, N., Shirani, S. & Samavi, S. Supervised deep learning for content-aware image retargeting with Fourier Convolutions. *Multimedia Tools and Applications* **1**. <https://doi.org/10.1007/s11042-024-18876-8> (2024).
- J3. **Naderi, Mohammad Reza**, Givkashi, M., Karimi, N., Shirani, S. & Samavi, S. Aesthetic-aware image retargeting based on foreground-background separation and PSO optimization. *Multimedia Tools and Applications* **1**. <https://doi.org/10.1007/s11042-023-16959-6> (2024).

- J4. **Naderi, Mohammad Reza**, Karimi, N., Emami, A., Shirani, S. & Samavi, S. Dynamic-Pix2Pix: Medical image segmentation by injecting noise to cGAN for modeling input and target domain joint distributions with limited training data. *Biomedical Signal Processing and Control* **85**. <https://doi.org/10.1016/j.bspc.2023.104877> (2023).
- J5. **Naderi, Mohammad Reza** & Hosseini Semnani, S. Color image segmentation using multi-objective swarm optimizer and multi-level histogram thresholding. *Multimedia Tools and Applications* **81**. <https://doi.org/10.1007/s11042-022-12443-9> (2022).

Working papers

- W1. **Naderi, Mohammad Reza**, Givkashi, M., Piri, F., Karimi, N. & Samavi, S. *Focal-unet: Unet-like focal modulation for medical image segmentation* ArXiv[Preprint]. 2022. <https://github.com/givkashi/Focal-Unet>.
- W2. **Naderi, Mohammad Reza**, Nabizadeh, Z., Karimi, N. & Samavi, S. *MSGDD-cGAN: Multi-Scale Gradients Dual Discriminator Conditional Generative Adversarial Network* ArXiv[Preprint]. 2021. <https://arxiv.org/abs/2109.05614>.

Tools & Software

Programming

Python	Proficient in using PyTorch and TensorFlow for deep learning and AI applications
Matlab	
C	
C++	

Teaching

Isfahan University of Technology

2020	Assistant Instructor, Computer Programming
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Shiraz University of Technology

2016	Assistant Instructor, Signal and Systems
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Other Experience

2021–	Co-Founder and Vice President of Engineering, Kanzova Construction, Isfahan, Iran Spearhead the application of AI technologies to revolutionize interior and exterior design for apartments and café-restaurants, ensuring innovative, functional, and aesthetically appealing results
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Languages

English	IELTS Academic Overall: 7.5
Persian	Native

Last updated: March 8, 2025