# Mo Shahdloo

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## Academic Experience

#### Research

2020-present Postdoctoral Researcher, FMRIB Centre/University of Oxford.

2014–2020 Graduate Researcher, ICON Lab/Bilkent University.

#### Teaching

2020-present Tutor, FMRIB Graduate Course, University of Oxford.

2014–2020 Teaching Assistant, EE Department, Bilkent University.

#### Education

Jan 2017 Ph.D., Bilkent University, Ankara/Turkey, Electrical and Electronics Engineering Department.

Feb 2020 Electrical and Electronics Engineering

Advisor: Tolga Cukur

Dissertation title: Optimization and Machine-Learning in MRI: Applications in Rapid MR Image Reconstruction and Encoding Models of Cortical Representations

Sep 2014 M.Sc., Bilkent University, Ankara/Turkey, Electrical and Electronics Engineering Department.

Dec 2016 Electrical and Electronics Engineering

Advisor: Tolga Çukur

Sep 2007 B.Sc., Amirkabir University of Technology, Tehran/Iran, Electrical Engineering Department.

Jun 2011 Electrical Engineering/Control Engineering

Advisor: Behzad Samadi

## Experience in Industry

2014-2014 Hardware developer, Farineh Fanavar, Tehran, Iran.

2013-2014 Senior software developer, K.A.G., Tehran, Iran.

2011-2013 RnD Engineer, Kerman Tablo, Tehran, Iran.

#### Publications

#### Articles

- [5] S. U. H. Dar, M. Yurt, M. Shahdloo, E. Ildiz, B. Tinaz, and T. Çukur, "Prior-Guided Image Reconstruction for Accelerated Multi-Contrast MRI via Generative Adversarial Networks," *IEEE Journal of Selected Topics in Signal Processing*, vol. 14, no. 6, pp. 1072–1087, Oct. 2020. DOI: 10.1109/JSTSP.2020.3001737.
- [4] I. Kiremitci, O. Yilmaz, E. Celik, M. Shahdloo, A. G. Huth, and T. Çukur, "Attentional Modulation of Hierarchical Speech Representations in a Multi-Talker Environment," bioRxiv, Dec. 2020. DOI: 10.1101/2020.12.05.412957.
- [3] M. Shahdloo, E. Çelik, and T. Çukur, "Biased competition in semantic representation during natural visual search," *NeuroImage*, vol. 216, no. 1, p. 116383, Aug. 2020. DOI: 10.1016/j.neuroimage.2019.116383.
- [2] M. Shahdloo, E. Ilicak, M. Tofighi, E. U. Saritas, A. E. Cetin, and T. Çukur, "Projection onto Epigraph Sets for Rapid Self-Tuning Compressed Sensing MRI," *IEEE Transactions on Medical Imaging*, vol. 38, no. 7, pp. 1677–1689, Jul. 2019. DOI: 10.1109/TMI.2018.2885599.

[1] S. U. H. Dar, M. Yurt, M. Shahdloo, and T. Çukur, "Synergistic Reconstruction and Synthesis via Generative Adversarial Networks for Accelerated Multi-Contrast MRI," arxiv, 2018. eprint: 1805.10704v1.

#### Peer Reviewed Conference Publications

- [7] S. U. H. Dar, M. Yurt, M. Shahdloo, and T. Çukur, "Joint recovery of variably accelerated multi-contrast mri acquisitions via generative adversarial networks," in 27th annual meeting of the International Society for MR in Medicine (ISMRM), Montreal, Jun. 2019, p. 0666.
- [6] M. Shahdloo, M. Acar, and T. Çukur, "Attention during story listening modulates temporal receptive windows across human cortex," in *Conference for Cognitive Computational Neuroscience (CCN)*, Berlin, Sep. 2019, PS–1A.52.
- [5] M. Shahdloo and T. Çukur, "Trade-off between fat-suppression and partial-voluming in weighted combination alternating repetition-time (ATR) balanced SSFP," in 36th annual meeting of the European Society for MRin Medicine and Biology (ESMRMB), Rotterdam, Oct. 2019, p. L06.09.
- [4] M. Shahdloo, B. Ürgen, E. Çelik, and T. Çukur, "Attention to action categories shifts semantic tuning toward targets across the brain," in 25th annual meeting of the Organization for Human Brain Mapping (OHBM), Rome, Jun. 2019, T661.
- [3] M. Shahdloo, E. Ilicak, M. Tofighi, E. U. Saritas, A. E. Cetin, and T. Çukur, "Rapid self-tuning compressed-sensing MRI using projection onto epigraph sets," in 26th annual meeting of the International Society for MR in Medicine (ISMRM), Paris, Jun. 2018, p. 0251.
- [2] M. Shahdloo and T. Çukur, "Biased competition in semantic representations during category-based visual search," in 23rd annual meeting of the Organization for Human Brain Mapping (OHBM), Vancouver, Jun. 2017.
- [1] M. Shahdloo, E. Ilicak, M. Tofighi, E. U. Saritas, A. E. Cetin, and T. Çukur, "Adaptive wavelet thresholding for profile-encoding reconstruction of balanced steady-state free precession acquisitions," in 34th annual meeting of the European Society for MRin Medicine and Biology (ESMRMB), Barcelona, Oct. 2017.

#### Invited Talks

- 2021 Voxelwise modelling: unraveling natural perception, NeuroTRACT symposium, online
- 2020 Mapping language representation in the brain using deep models, 7th Iranian Human Brain Mapping Congress, *online*
- 2019 Biased competition in semantic representations during visual search, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan

#### Honors and Awards

- 2014–2021 Full scholarship granted by Bilkent University for graduate studies
  - 2012 Ranked 28th among 100k participants in Iranian national higher education examination
  - 2006 Bronze medal in the Iranian National Physics Olympiad

# Community Service

Editorial Frontiers in Neuroscience

board OHBM Aperture

Ad-hoc IEEE Transactions on Medical Imaging

reviewing ISMRM

Conference on Cognitive Computational Neuroscience (CCN)

# Scientific Organization Memberships

- (ISMRM)
- European Society for MR in Medicine and Biology (ESMRMB)
- o International Society for MR in Medicine o Organization for Human Brain Mapping (OHBM)

### References

- o Dr. Mark Chiew, FMRIB Centre, University of Oxford, mark.chiew@ndcn.ox.ac.uk
- o Dr. Tolga Çukur, EEE Dept. and UMRAM, Bilkent University, cukur@ee.bilkent.edu.tr