Mo Shahdloo

Wellcome Centre for Integrative Neuroimaging
Department of Experimental Psychology
University of Oxford

FMRIB Centre, John Radcliffe Hospital
Oxford, UK - OX3 9DU
+44 7423 814282
mo.shahdloo@psy.ox.ac.uk
moshahdloo.com

Academic Experience

Research

2020–present **Postdoctoral Researcher**, *Physics Group, FMRIB, University of Oxford.*
2014–2020 **Graduate Researcher**, *ICON Lab, Bilkent University.*

Teaching

2020–present **Tutor**, *FMRIB Graduate Course*, University of Oxford.
2021 **Lead Project TA**, *Neuromatch Academy Summer School.*
2014–2020 **Teaching Assistant**, *EE Department*, Bilkent University.

Education

Jan 2017 – Feb 2020 **Ph.D.**, *Bilkent University*, Ankara, *Electrical and Electronics Engineering Department.*
Electrical and Electronics Engineering
Advisor: Tolga Çukur
Dissertation title: *Optimization and Machine-Learning in MRI: Applications in Rapid MR Image Reconstruction and Encoding Models of Cortical Representations*

Sep 2014 – Dec 2016 **M.Sc.**, *Bilkent University*, Ankara, *Electrical and Electronics Engineering Department.*
Electrical and Electronics Engineering
Advisor: Tolga Çukur

Sep 2007 – Jun 2011 **B.Sc.**, *Amirkabir University of Technology*, Tehran, *Electrical Engineering Department.*
Electrical Engineering/Control Engineering
Advisor: Behzad Samadi

Publications

Articles

[6] 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," *Cerebral Cortex*, Jun. 2021. DOI: 10.1093/cercor/bhab136.

[5] **M. Shahdloo**, E. Çelik, B. A. Urgen, J. L. Gallant, and T. Çukur, "Task-Dependent Warping of Semantic Representations During Search for Visual Action Categories," *biorxiv*, Jul. 2021. DOI: 10.1101/2021.06.17.448789.

[4] 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.

[3] **M. Shahdloo**, E. Çelik, and T. Çukur, "Biased Competition in Semantic Representation During Natural Visual Search," *NeuroImage*, vol. 216, no. 1, p. 116 383, 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

[9] D. Papp, U. Schüffelgen, **M. Shahdloo**, *et al.*, "Imaging performance of a multi-channel non-human primate coil," in *ISMRM*, Online, May 2021, p. 3224.

[8] **M. Shahdloo**, D. Papp, U. Schüffelgen, K. Miller, M. Rushworth, and M. Chiew, "Highly accelerated fMRI of awake behaving non-human primates via model-based dynamic off-resonance correction," in *ISMRM*, Online, May 2021, p. 257.

[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 *ISMRM*, Montreal, Jun. 2019, p. 0666.

[6] **M. Shahdloo**, M. Acar, and T. Çukur, "Attention during story listening modulates tempo-ral receptive windows across human cortex," in *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 *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 *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 *ISMRM*, Paris, Jun. 2018, p. 0251.

[2] **M. Shahdloo** and T. Çukur, "Biased competition in semantic representations during category-based visual search," in *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 *ESMRMB*, Barcelona, Oct. 2017.

Invited Talks

2021 k-space and MR image reconstruction, educational talk at British and Irish chapter of ISMRM

2021 Voxelwise modelling: unraveling natural perception, NeuroTRACT symposium

2020 Mapping language representation in the brain using deep models, 7th Iranian Human Brain Mapping Congress

2019 Biased competition in semantic representations during visual search, Institute for Advanced Studies in Basic Sciences (IASBS)

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 board: Frontiers in Neuroinformatics
OHBM Aperture

Ad-hoc reviewing: IEEE Transactions on Medical Imaging
ISMRM
Conference on Cognitive Computational Neuroscience (CCN)

Scientific Organization Memberships

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

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.

References

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