

# Mo Shahdloo

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## Academic Experience

### RESEARCH

2020- *Postdoctoral Researcher*, Physics Group, FMRIB, University of Oxford  
2014-20 *Graduate Researcher*, ICON Lab, Bilkent University

### TEACHING

2020- *Tutor*, FMRIB Graduate Course, University of Oxford  
2021-21 *Lead Project TA*, Neuromatch Academy Summer School  
2014-20 *Teaching Assistant*, EE Department, Bilkent University

## Education

2017-20 PhD in Electrical and Electronics Engineering, Bilkent University, Ankara  
Advisor: Tolga Çukur  
Dissertation title: *Optimization and Machine-Learning in MRI: Applications in Rapid MR Image Reconstruction and Encoding Models of Cortical Representations*  
2014-16 MSc in Electrical and Electronics Engineering, Bilkent University, Ankara  
Advisor: Tolga Çukur  
2007-11 BSc in Electrical Engineering, Amirkabir University of Technology, Tehran  
Advisor: Behzad Samadi

## Publications and Talks

### ARTICLES

7. **Shahdloo M**, Schüffegen U, Papp D, Miller K, and Chiew M. Model-based dynamic off-resonance correction for improved accelerated fMRI in awake behaving non-human primates. *Magnetic Resonance in Medicine* 2022. DOI: 10.1002/mrm.29167.
6. Kiremitci I, Yilmaz O, Celik E, **Shahdloo M**, Huth AG, and Çukur T. Attentional Modulation of Hierarchical Speech Representations in a Multi-Talker Environment. *Cerebral Cortex* 2021. DOI: 10.1093/cercor/bhab136.

5. **Shahdloo M**, Çelik E, Urgan BA, Gallant JL, and Çukur T. Task-Dependent Warping of Semantic Representations During Search for Visual Action Categories. *bioRxiv* 2021. DOI: 10.1101/2021.06.17.448789.
4. Dar SUH, Yurt M, **Shahdloo M**, Ildiz E, Tinaz B, and Çukur T. Prior-Guided Image Reconstruction for Accelerated Multi-Contrast MRI via Generative Adversarial Networks. *IEEE Journal of Selected Topics in Signal Processing* 2020;14:1072–87. DOI: 10.1109/JSTSP.2020.3001737.
3. **Shahdloo M**, Çelik E, and Çukur T. Biased Competition in Semantic Representation During Natural Visual Search. *NeuroImage* 2020;216:116383. DOI: 10.1016/j.neuroimage.2019.116383.
2. **Shahdloo M**, Ilicak E, Tofghi M, Saritas EU, Cetin AE, and Çukur T. Projection onto Epigraph Sets for Rapid Self-Tuning Compressed Sensing MRI. *IEEE Transactions on Medical Imaging* 2019;38:1677–89. DOI: 10.1109/TMI.2018.2885599.
1. Dar SUH, Yurt M, **Shahdloo M**, and Çukur T. Synergistic Reconstruction and Synthesis via Generative Adversarial Networks for Accelerated Multi-Contrast MRI. *arxiv* 2018. eprint: 1805.10704v1.

#### PEER REVIEWED CONFERENCE PUBLICATIONS

10. **Shahdloo M** and Chiew M. Optimal Singular-Value Shrinkage for fMRI Denoising. In: *ISMRM*. Online, 2022:4042.
9. Papp D, Schüffegen U, **Shahdloo M**, Rieger SW, Hess AT, Rushworth M, and Clare S. Imaging Performance of a Multi-channel Non-human Primate Coil. In: *ISMRM*. Online, 2021:3224.
8. **Shahdloo M**, Papp D, Schüffegen U, Miller K, Rushworth M, and Chiew M. Highly Accelerated fMRI of Awake Behaving Non-human Primates via Model-based Dynamic Off-resonance Correction. In: *ISMRM*. Online, 2021:257.
7. Dar SUH, Yurt M, **Shahdloo M**, and Çukur T. Joint Recovery of Variably Accelerated Multi-contrast MRI Acquisitions via Generative Adversarial Networks. In: *ISMRM*. Montreal, 2019:0666.
6. **Shahdloo M**, Acar M, and Çukur T. Attention During Story Listening Modulates Temporal Receptive Windows Across Human Cortex. In: *CCN*. Berlin, 2019:PS-1A.52.
5. **Shahdloo M** and Çukur T. Trade-off Between Fat-suppression and Partial-voluming in Weighted Combination Alternating Repetition-time (ATR) Balanced SSFP. In: *ESMRMB*. Rotterdam, 2019:Lo6.09.
4. **Shahdloo M**, Urgan B, Çelik E, and Çukur T. Attention to Action Categories Shifts Semantic Tuning Toward Targets Across the Brain. In: *OHBM*. Rome, 2019:T661.
3. **Shahdloo M**, Ilicak E, Tofghi M, Saritas EU, Cetin AE, and Çukur T. Rapid Self-tuning Compressed-sensing MRI Using Projection onto Epigraph Sets. In: *ISMRM*. Paris, 2018:0251.
2. **Shahdloo M** and Çukur T. Biased Competition in Semantic Representations During Category-based Visual Search. In: *OHBM*. Vancouver, 2017.
1. **Shahdloo M**, Ilicak E, Tofghi M, Saritas EU, Cetin AE, and Çukur T. Adaptive Wavelet Thresholding for Profile-Encoding Reconstruction of Balanced Steady-State Free Precession Acquisitions. In: *ESMRMB*. Barcelona, 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

- 2014-21 Full scholarship granted by Bilkent University for graduate studies
- 2012 Ranked 28th among 100k participants in Iranian national higher education examination in Electrical Engineering
- 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
- Signal, Image and Video Processing (SIVP)
- ISMRM annual meeting
- Conference on Cognitive Computational Neuroscience (CCN)

## Experience in Industry

- 2014-14 *Hardware developer*, Farineh Fanavar, Tehran, Iran
- 2013-14 *Senior software developer*, KAG inc., Tehran, Iran
- 2011-13 *RnD Engineer*, Kerman Tablo, Tehran, Iran

## References

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**Prof. Karla Miller**,  
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