

Research overview

Mohammad Mahdi Naghsh

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Research interests

- Statistical and array signal processing
- Signal processing for active sensing/communication systems
- Health related topics, e.g, computational neuroscience, medical image processing

Selected publications

- ✓ "A Doppler Robust Design of Transmit Sequence and Receive Filter in the Presence of Signal-Dependent Interference", IEEE transactions on Signal Processing, vol. 62, pp. 772-785, 2014.
- ✓ "Radar Code Design for Detection of Moving Targets", IEEE Transactions on aerospace and electronic systems, In Press, 2014.
- ✓ "Unified Optimization Framework for Multi-Static Radar Code Design using Information-theoretic Criteria", IEEE Transaction on Signal Processing, vol. 61, pp. 5401-5416, 2013.

Issued U.S. Patent

Method and system for reducing out of band radiation in orthogonal frequency division multiplexing systems, (Issued on July 2013)

Assignee: Isfahan University of Technology, Sponsor: Isfahan Science and Technology Town

Some ongoing/previous research topics

- ✓ Signal design for active sensing systems

- ✓ Code design for active sensing/communication systems

- ✓ Designing amplification matrix in AF (Massive) MIMO relay networks

- ✓ On the design of training sequences for MIMO Communications

- ✓ Detection (and estimation) in MIMO radars

- ✓ Signal processing for passive radars

- ✓ Imaging radar systems (Synthetic aperture radar (SAR))

Contact Information

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