

Curriculum Vitae

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Education Details:

- **Doctor of Philosophy (Ph.D.), 1994-1998**

Thesis title: *Performance Analysis of Adaptive Lattice Filters for FM Signals and Alpha-Stable Processes*

Signal Processing Research Centre
School of Electrical and Electronic Systems Engineering
Faculty of Built Environment and Engineering
Queensland University of Technology (QUT), Australia.

- **Master of Science (M.Sc.), 1992-1994**

Thesis title: *Design of IIR Adaptive Lattice Filters in System Modeling and Prediction Applications.*

Graduate School of Engineering
Department of Electrical and Electronic Engineering
University of the Ryukyus, Japan.

- **Bachelor of Science (B.S.), 1977-1986**

Electrical Engineering Department,
Faculty of Computer & Electrical Engineering
Isfahan University of Technology, Isfahan, Iran.

Research & Academic Experiences:

- *Feb. 1999 - Now*
Signal and System Modeling lab.,
School of Electrical Engineering,
Iran University of Science and Technology, Tehran.
Current Position: Associate Prof.
- *Apr. 1998 - Aug. 1998*
Signal Processing Research Center, Brisbane, Australia
Position: Researcher
Research project: EEG Signal Modeling.
- *1991-1992*
Graduate School of Engineering
Department of Electrical and Electronic Engineering
University of the Ryukyus, Japan
Position: Research Assistant
- *Dec. 1987 - Oct. 1990*
Iran Telecommunication Research Center (ITRC), Tehran
Position: Project technical manager
Research project: Communication systems analysis
- *Feb. 1986 - Oct. 1987*
Shahab Radio Company (Isfahan branch)
Position: R & D manager
- *Jun. 1981 - Aug. 1983*
Isfahan University of Technology
Position: Researcher
Research project: Digital and Electronic Hardware Design

Courses Taught:

- Digital Signal Processing
- Adaptive Filters Theory
- Estimation Theory
- Spectral Estimation
- Signals and Systems Analysis

Skills in Computer Languages:

- Programming languages: Borland C, Fortran, Assemblers
- Packages: MATLAB, TFSA
- Platforms: UNIX workstations, PCs

Awards:

- Postgraduate Scholarship from the Ministry of Culture and Higher Education, I.R. of Iran for postgraduate studies (PhD).
- Postgraduate Scholarship from Ministry of Higher Education of Japan (Monbusho) for a M.Sc. course.

Research Interests:

- Active Noise Control systems
- Adaptive Signal Processing
- Detection and Estimation
- Radar Systems
- Blind Separation of Speech Signals
- Time-Frequency Analysis
- Fault Detection in Mechanical Systems
- Speech Source DOA Estimation, Localization, and Tracking
- Compressed Sensing
- Cooperative Wireless Communication
- Array & Sparse Signal Processing

Publications of M. H. Kahaei

References

- [1] H. Abbasi and M. H. Kahaei. Improving source localization in LOS and NLOS multipath environments for UWB signals. In *14th Int. CSI Computer Conf.*, Tehran, Iran, Oct. 2009.
- [2] B. Abolhassani, S. Ghavami, and M. H. Kahaei. Effects of transmitter nonlinearity on the performance of decorrelating and MMSE detectors in CDMA cellular networks. In *IST2005*, pages 585–589, Shiraz, Sep. 2005.
- [3] M. Asadi and M. H. Kahaei. Efficient sensor selection based on spatial correlation in wireless sensor networks . In *14th Int. CSI Computer Conf.*, Tehran, Iran, Oct. 2009.
- [4] M. Asadi and M. H. Kahaei. Improvement of blind estimation of number of users in FH spread spectrum systems in low SNRs. In *14th Int. CSI Computer Conf.*, Tehran, Iran (in Persian), Mar. 2009.
- [5] M. Asadi and M. H. Kahaei. Real-time blind separation of FHSS signals using JADE algorithm with a solution to permutation problem. In *14th Int. CSI Computer Conf.*, Tehran, Iran (in Persian), Mar. 2009.
- [6] M. Atashbar and M. H. Kahaei. Multi-speakers direction-of-arrival finding using ICA . In *ICTTA2006*, Syria, Mar. 2006.
- [7] M. Atashbar and M. H. Kahaei. A new adaptive particle filter for target localization using TDOA and FDOA. In *13th Int. CSI Computer Conf.*, Kish, Iran, Mar. 2008.
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- [10] M. Atashbar and M. H. Kahaei. DOA estimation of multiple speakers using new spatial sparse algorithm . In *18th Int. Elec. Eng. Conf.*, pages 2956–2961, Isfahan,Iran (in Persian), May 2010.
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- [14] M. Atashbar and M. H. Kahaei. Coherent l1-SVD method for DOA estimation of wideband signals. *IEEJ Trans. on Electrical and Electronic Engineering*, 9:97–99, 2014.
- [15] M. Atashbar and M. H. Kahaei. Unitary coherent strategy for spatial sparsity-based DOA estimation of wideband signals. *IEEJ Trans. on Electrical and Electronic Engineering*, 9:563–565, 2014.

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