# **Curriculum Vitae**





NAME & SURNAME: Karim Ansari-Asl

DATE OF BIRTH: 1974

**2** ADDRESS: Department of Electrical Engineering,

Faculty of Engineering,

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Ahvaz, Iran.

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## **PROFESSIONAL PROFILE:**

Associate Professor of Electrical Engineering in Shahid Chamran University (SCU) of Ahvaz, Iran

## **EDUCATION BACKGROUND:**

Dec. 2005	Ph.D. in Signal processing, University of Rennes 1, Rennes, France.
Sept. 1999	M.Sc. in Bioelectric Eng., Iran university of science and technology, Tehran, Iran.
Sept. 1995	B.Sc. in Electronic Eng., University of Semnan, Semnan, Iran



# **TEACHING AND TRAINING EXPERINCE:**

Taught Courses:

- Biomedical Signal Processing
- Biomedical Instrumentation
- Digital Signal Processing
- Digital Image Processing
- Engineering Mathematics
- Analogous and Digital Electronic Circuits

- Electrical Circuits
- Logic Circuits
- Linear Control Systems
- Signals and Systems
- Technical English

## **INTERESTS AND RESEARCH FIELDS:**

Digital Signal Processing (DSP)

Digital Image Processing (DIP)

Artificial Intelligent (AI)

Application of DSP, DIP and AI to many domains such as: medical, geological, mechanical

# **RESEARCH ACTIVITIES:**

#### **PUBLICATIONS:**

#### **Book Chapter:**

 L. Senhadji, K. Ansari-Asl, and F. Wendling, "From EEG Signals to Brain onnectivity: Methods and Applications in Epilepsy," In Nait-Ali, Amine (Ed.), *Advanced Biosignal Processing*, pp. 145-164, 2009.

### Selected Journal Papers:

- E. Fatemi-Behbahani, E. Farshidi, and K. Ansari-Asl, "A new approach to analysis of residue probability density function in pipelined ADCs," Integration, the VLSI Journal, vol. 52, pp. 51-61, 2016.
- [2] E. Fatemi-Behbahani, K. Ansari-Asl, and E. Farshidi, "A new approach to analysis of residue probability density function in pipelined ADCs," Circuits, Systems, and Signal Processing, pp. 1-17, online Feb. 2016.



- [3] E. Fatemi-Behbahani, E. Farshidi, and **K. Ansari-Asl**, "Analysis of chaotic behavior in pipelined analog to digital converters," AEU-International Journal of Electronics and Communications, vol. 70, pp. 301-310, 2016.
- [4] V. Rowghanian, **K. Ansari-Asl**, "Object tracking by mean shift and radial basis function neural networks," Journal of Real-Time Image Processing, pp. 1-18, 2015
- [5] F. Shayegh, S. Sadri, R. Amirfattahi, K. Ansari-Asl, J. Bellanger, and L. Senhadji, "Hippocampal effective synchronization values are not pre-seizure indicator without considering the state of the onset channels," Network: Computation in Neural Systems, vol. 25, no. 4, pp. 139-167, 2014.
- [6] F. Shayegh, R. AmirFattahi, S. Sadri, and K. Ansari-Asl, "A model-based method for computation of correlation dimension, Lyapunov exponents and synchronization from depth-EEG signals," Computer Methods and Programs in Biomedicine, vol. 113, no. 1, pp. 323-337, 2014.
- [7] F. Shayegh, R. AmirFattahi, S. Sadri, and K. Ansari-Asl, "Proposing a two-level stochastic model for epileptic seizure genesis," Journal of computational neuroscience, vol. 34, no. 3, pp. 1-15, 2013.
- [8] F. Shayegh, J. Bellanger, R. AmirFattahi, S. Sadri, K. Ansari-Asl, and L. Senhadji, "Analysis of the behavior of a seizure neural mass model using describing functions," Journal of Medical Signals and Sensors, vol. 3, no. 1, 2013.
- [9] A. M. Gharravi, M. Orazizadeh, **K. Ansari-Asl**, S. Banoni, S. Izadi, M. Hashemitabar, "Design and fabrication of anatomical bioreactor systems containing alginate scaffolds for cartilage tissue engineering," Avicenna journal of medical biotechnology, vol. 4, no. 2, pp. 65-74, 2012.
- [10] F. Shayegh, R. AmirFattahi, S. Sadri, and K. Ansari-Asl, "A brief survey of computational models of normal and epileptic EEG signals: a guideline to model based seizure prediction," Journal of Medical Signals and Sensors, vol. 1, no. 1, Feb. 2011.
- [11] F. Wendling, K. Ansari-Asl, F. Bartolomei, and L. Senhadji, "From EEG signals to brain connectivity: A model-based evaluation of interdependence measures," Journal of Neuroscience Methods, vol. 183, no. 1, pp. 9-18, 2009.
- [12] K. Ansari-Asl, L. Senhadji, F. Wendling, and J.J. Bellanger, "Quantitative evaluation of linear and nonlinear methods characterizing interdependencies between brain signals," *Physical Review E (Stat. Nonlin. Soft Matter Phys.)*, vol. 74, 031916, 2006.
- [13] K. Ansari-Asl, J.J. Bellanger, F. Bartolomei, F. Wendling, and L. Senhadji, "Time-frequency characterization of interdependencies in nonstationary signals. Application to epileptic EEG," *IEEE Trans. on Biomed. Eng.*, vol. 52, no. 7, pp. 1218-1226, 2005.

### **CONFERENCE PRESENTATIONS:**

# **Curriculum Vitae**



- [1] N. Taheri, A. Kachenoura, K. Ansari-Asl, A. Karfoul, L. Senhadji, L. Albera, I. Merlet, "Feasibility of blind source separation methods for the denoising of dense-array EEG," 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp. 4773-4776, Milan, Italy, Aug. 2015.
- [2] S. Kazemi, K. Ansari-Asl, and S. Homayouni, "End-member Abundance Coefficients Estimation using Particle Swarm Optimazation," 16<sup>th</sup> Iranian Conf. on Geophysics, Tehran, Iran, May, 2014.
- [3] H. Ebrahimi, K. Ansari-Asl, "Blind Blind Image Watermarking Using Wavelet Coefficient Distance," 7<sup>th</sup> Iranian Conf. on Machine Vision and Image Processing, Tehran, Iran, Nov. 16-17, 2011.
- [4] A. Javadi-Nasab, K. Ansari-Asl, A. Mallah-Zadeh, "MRI image segmentation using bilateral filter algorithm," 17<sup>th</sup> Iranian Conf. on Biomedical Eng., Nov. 2010, Isfahan, Iran.
- [5] K. Ansari-Asl, G. Chanel, T. Pun, "A channel selection method for EEG classification in emotion assessment based on synchronization likelihood," 15th Eur. Signal Proc. Conf. (Eusipco 2007), Poznan, Poland, Sept. 3-7, 2007.
- [6] G. Chanel, K. Ansari-Asl, T. Pun, "Valence-arousal evaluation using physiological signals in an emotion recall paradigm," *IEEE Int. Conf. on Systems, Man and Cybernetics (SMC 2007)*, Montreal, Canada, Oct. 7-10, 2007.
- [7] K. Ansari-Asl, L. Senhadji, F. Wendling, and J.J. Bellanger, "Quantitative comparison of signal analysis methods for characterization of brain functional connectivity," 3rd European Medical & Biological Eng. Conf. (EMBEC'05), Prague, Czech Republic, Nov. 20-25, 2005.
- [8] K. Ansari-Asl, F. Wendling, J.J. Bellanger, and L. Senhadji, "Comparison of two estimators of time-frequency interdependencies between nonstationary signals: application to epileptic EEG," 26th Annual Int. Conf. of the IEEE EMBS, pp. 263-266, San Francisco, USA, Sept. 1-5, 2004.
- [9] K. Ansari-Asl, F. Wendling, J.J. Bellanger, and L. Senhadji, "Suivi de relation en temps et en fréquence dans les signaux SEEG épileptiques. Évaluation de deux estimateurs linéaires," 19th GRETSI Symposium on Signal and Image Processing, vol. 1, pp. 281-4, Paris, France, Sept. 8-11, 2003 (in French).

# LANGUAGES:

**PERSIAN:** Native

**ENGLISH & FRENCH: Fluent**