Seyedeh Samaneh Shojaei Langari

Assistant Professor

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EDUCATION

PhD, Biomedical Engineering, Nanyang Technological University, 2015

GPA: 4.88 out of 5.00

Thesis: Robust representation and recognition of facial emotions

Supervisors: Dr. Yau wei yun (Singapore A-star) and Prof. Eam Khwang Teoh

MSc, Biomedical Engineering, Amirkabri University of Technology, 2009

GPA: 18.81 out of 20.00

Thesis: artificial immune systems application in biological signal pattern recognition

Supervisor: Prof. Mohammad Hassan Moradi

BSc, Medical Biomedical Engineering, Amirkabri University of Technology, 2006

GPA: 17.77 out of 20.00

Thesis: Finger print processing for person identification

RESEARCH EXPERIENCE

Postdoctoral Fellow, Institute for Research in Fundamental Sciences (IPM), Tehran, Iran, 2016-2020

Analysis of brain activity in stuttering disorder: structural and functional neuroimaging study.

Postdoctoral Fellow, Tehran University of Medical Sciences, Tehran, Iran, 2015-2016

Recovery of missing data in partial geometry PET scanners.

Postdoctoral Fellow, Lee Kong Chian School of Medicine, NTU, Singapore, 2014-2015

Resting-state MEG connectivity dysfunction as a biomarker for neurodegenerative diseases.

RESEARCH INTEREST

Image processing, Pattern recognition, Machine vision, Video processing, Bio-image/signal processing

PUBLICATIONS

Z Vaezi, …. **S Shojaeilangari**, *Investigation of the programmed cell death by encapsulated cytoskeleton drug liposomes using a microfluidic platform*. Microfluidic & Nanofluidic 2020, 24 (48), 48-60

M. Ghorbani, … **S. Shojaeilangari**, *Effects of natural compounds on conformational properties and hairpin formation of amyloid-β42 monomer: docking and molecular dynamics simulation study.* Journal of Biomolecular Structure and Dynamics. 2019, Sep 11: 1-13

H. Soleimani,… **S. Shojaeilangari**, *Activation of human insulin by vitamin E: A molecular dynamics simulation study* Journal of Molecular Graphics and Modelling. 2019, Sep 91: 194-203

S. Shojaeilangari, …. and M. R. Ay. *Recovery of missing data in partial geometry PET scanners: compensation in projection space vs image space.* Medical Physics. 2018, Vol. 45, No. 12, pp 5437-5449

S. Shojaeilangari, ... E. K. Teoh. *Pose-invariant Descriptor for Facial Emotion Recognition.* Machine Vision and Applications. 2016, Vol. 27, No. 7, pp 1063–1070

S. Shojaeilangari, … E. K. Teoh *Robust Representation and Recognition of Facial Emotions Using Extreme Sparse Learning.* IEEE transactions on Image Processing. 2015, Vol. 24, No. 7, pp. 2140-2152

S. Shojaeilangari, … E. K. Teoh. *A Novel Phase Congruency based Descriptor for Dynamic Facial Expression Analysis.* Pattern Recognition Letters. 2014, Vol. 49, pp. 55-61

S. Shojaeilangari, … E. K. Teoh. *Multi-scale Analysis of Local Phase and Local Orientation for Dynamic Facial Expression Recognition.* Journal of Multimedia Theory and Applications 2014 Vol. 2, No. 1, pp. 1-10

PRESENTATIONS

S. Shojaeilangari, M. R. Ay, European Association of Nuclear Medicine (EANM'16). Barcelona/Spain, October 2016. *Compensation of Missing Data in Sinograms of a PET Scanner with Partial Geometry for Robust Image Reconstruction.*

S. Shojaeilangari, W. Y. Yau, J. Li, and E. K. Teoh. International Conference on Multimedia and Human Computer Interaction (MHCI 2013). Canada, Jul 2013, pp. 57_1-57_8. Dynamic facial expression analysis based on histogram of local phase and local orientation

S. Shojaeilangari, W. Y. Yau, J. Li, and E. K. Teoh. 12th International Conference on Control, Automation, Robotics and Vision (ICARCV 2012) China, May 2012, pp. 166-170. *Feature Extraction through Binary Pattern of Phase Congruency for Facial Expression Recognition.*

S. Shojaeilangari, W. Y. Yau, and E. K. Teoh. 8th International Conference on Information, Communications and Signal Processing (ICICS). Singapore, 2011, pp. 1-5, *Person Independent Facial Expression Analysis using Gabor Features and Genetic Algorithm*

AWARDS AND HONORS

- Award from National Organization for Exceptional Talents for faculty member employment 2020
- Singapore International Graduate Student Award (SINGA) for PhD scholarship 2010