

# Sam Sharifzadeh Javidi

[samjavidi@outlook.Com](mailto:samjavidi@outlook.Com)

Tehran, Iran

date of birth: 24.03.1986



---

## Education

---

### PhD of Bio-electric Engineering

#### Tehran University of Medical Sciences

Feb 2015 – June 2021

Thesis title: Extracting perfusion information from diffusion weighted MRI

Courses: Advanced Medical image processing, Biomedical signal processing, Advanced imaging (CT, MRI, PET, Ultrasound),

### Master of Science in Bio-Electric Engineering

#### Shiraz University

Shiraz, Iran

Sept 2011 – Oct 2013

Courses: Image processing, Digital signal processing, Pattern recognition, Fuzzy logic

### Bachelor of Science in Electronic Engineering

#### Shahid Chamran University

Ahvaz, Iran

Sep 2005 – July 2010

---

## PROJECTS

---

### Extracting Perfusion Information from Diffusion Weighted MRI

The Least Needed SNR to Get Valid Outputs is Calculated.

Noise Reduction Images to Estimate Perfusion Parameters.

An alternative imaging to get better SNR and providing more accurate parameters

### Feature Extraction and Classification of EEG Signals to Detect Epileptic Seizures (Master Thesis)

Developed a Hybrid Method Using Time-frequency Domain and Fractional Fourier Transform.

### Neurofeedback

Processing EEG Signals to Remove Low and High Artifacts and Also Determine  $\theta$ ,  $\delta$ ,  $\alpha$ ,  $\beta$  and  $\gamma$  Frequency Bands.

Design a GUI to Give Feedback to Client and Also Show Analyzed Signal to User.

---

## SKILLS

---

FSL, SPM, ExploreDTI, DiPy, Nipy, Nilearn

MATLAB, C++, Python,

Image Processing, Signal Processing

MS Office (Word, Excel, Powerpoint)

Endnote, LATEX

---

## EXPERIENCE

---

Biomedical Researcher

**Medical Instruments Research Center Of Tehran University Of Medical Sciences** Jan 2018 –Present  
Tehran, Iran

Research on a Noninvasive MR Perfusion Imaging Model.

Designing a python software in order to classify Alzheimer's , MCI and normal based on T1 volumetry and DTI

Technical Engineer

**Farmedtajhiz Ltd.** Dec 2015 –2018 Tehran, Iran

Research and Development of Producing Eye-Tracker Equipment.

Research and Development of Producing Neurofeedback Equipment.

Teaching and Supporting Customers to Use Equipment like rTMS, tDCS, ECT

Biomedical Engineer

**Iranian Space Agency (Mechanic Research Center)** Oct 2013 – May 2014 Shiraz, Iran

Research and Development of Medical Equipment to Record and Transmit Vital Signals of Astronaut.

Working with Team on Design, Development and Integration of a System to Record and Transmit Vital Signals.

---

## Publications

---

Published

- ❖ Sharifzadeh Javidi S, Saligheh Rad H. Intra-Voxel Incoherent Motion Reconstruction with Multi-Orientation Acquisition using Three b-Values, ISMRM. 2021
- ❖ Sharifzadeh Javidi S, Saligheh Rad H. Using Kalman Filter to Improve the Accuracy of Diffusion Coefficients in MR Imaging: A Simulation Study, Iran J Radiol. 2019 ; 16(Special Issue):e99153. doi: 10.5812/iranjradiol.99153.
- ❖ S. Sharifzadeh, F. Tajeripoor, Improve Recognition of Epilepsy by Make a Difference in Wigner-Vile Distribution," 11th international congress on epilepsy "2015, Tehran, Iran
- ❖ S. Sharifzadeh, F. Tajeripoor, Combination of Fractional Fourier Transform and Time-Frequency Plane to Classify Epileptic Signals,"3th Basic and Clinical Neuroscience Congress 2014", Tehran, Iran

### **Accepted**

- ❖ Sharifzadeh Javidi S, Shirazinodeh A, Saligheh Rad H. Intravoxel Incoherent Motion Quantification is Dependent on Measurement SNR and Tissue Perfusion: a simulation study. J Biomed Phys Eng. 2021

### **Submitted**

- ❖ Sharifzadeh Javidi S, Saligheh Rad H. A Reproducible Intravoxel Incoherent Motion Imaging Based on SNR Enhancement Employing Independent Component Analysis.2021
- ❖ Sharifzadeh Javidi S, Ahadi R, Saligheh Rad H. A Reproducible Hybrid IVIM-DTI Model with Optimized Acquisition Time Employing Kalman Filter.2021