

Zahra Alizadeh Sani,MD,Associate Professor of cardiology



### ❖ Personal Information

- First Name: **Zahra**
- Last name: **Alizadeh Sani**
- Birth date: **20/02/1974**
- Place of birth: **Mashhad, Iran**
- Marital Status: Married/ Female

### ❖ Mailing Address

- Cardiovascular Imaging Department, Rajaei Cardiovascular, Medical & Research Center,Iran University , Tehran, Iran. Post code:1996911151
- Cell-phone: +98-9127623881 Tel (Home): +98-21-22058631
- Email: Dr\_Zahra\_Alizadeh@yahoo.com  
d.Alizadeh.sani@gmail.com  
Drzas@rhc.ac.ir

### ❖ Education

- Certification of Cardiac MRI observership course (07. Sep -07. Oct 2016) Royal Brompton & Harefield CMR Unit. London
- Hands on Cardiac Magnetic Resonance 2016 (4-8 July,2016), Centro Cardiologico Monzino,IRCCS Milan
- Compact course on CMR (16-20 June 2014), cmr-academy, German Heart Institute Berlin
- CVMR course, 9-19 september 2014, USLA health system, USA
- CMR recognition letter of level III Grandfather in Iran, March 2013
- MR Cardiac development course, 22-23 September 2013, philips health care dubai
- SCMR recognition letter of Level II, May 2012
- Certification of cardiovascular Magnetic Resonance Imaging examination organized by the working group on cardiovascular Magnetic Resonance of the European society of cardiology in Nice France (Feb.2011)
- Certification of cardiac MR Fellowship (16. May 2011-01. July 2011), Charite, Campus Berlin Buch, HELIOS Klinikum Berlin Buch. Germany
- Certification of Cardiac MRI observership course (01. Sep -30. Sep 2011) Royal Brompton & Harefield CMR Unit. London
- Certificate of Achievement, SCMR introductory CMR Course, Course Grade 98.90%, Sep 2011
- MRI,AVANTO Course Application Training , June 2010,Iran
- Basic Cardiac MR Fellowship(June.2009), St-Marien-Hospital Bonn Germany
- Certification of cardiac CT course (04.-08. July 2011), Erlangen University Germany
- Education CT Course on siemens Definition Flash and somatom-force-dual-source-CT-scanner, (2011,2016), Iran
- Fellowship in Echocardiography (Sep.2007-Mar.2009), Iran University of Medical Sciences, Tehran, Iran (First ranked in the University)
- Cardiologist, Mashhad University of Medical Science, Mashhad, Iran (Fifth ranked in the

national board of Iran cardiology(Sep.2006)

- **Residency.** (Oct. 2002-Sep. 2006), Resident of Cardio Vascular Diseases, Mashhad University of Medical Sciences, Mashhad, Iran (First ranked in the university in all residency period)
- **General Physician.** (Oct. 1991-Sep. 1998) Mashhad University of Medical Sciences, Mashhad, Iran
- **H.S. Diploma** (Sep. 1987-Aug. 1991), Experimental Sciences, Farabi High school, Tabas, Iran

## Publications

Some of the articles are listed in following section. To see all of them [click here](#)

### ❖ Journal Papers:

1. Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **A data mining approach for diagnosis of coronary artery disease**, Computer Methods and Programs in Biomedicine, 111(1), pp.52-61, 2013. (ISI Journal; IF=1.862) [click here](#)
2. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Automatic detection of end-diastole and end-systole from echocardiography images using manifold learning**, Physiological Measurement, 31(9), 2010. (ISI Journal; IF=1.576) [click here](#)
3. Hamidreza Ghasemi Bahraseman , **Zahra Alizadeh Sani**, et al., **Effect of exercise on blood flow through the aortic valve: a combined clinical and numerical study**, Computer Methods in Biomechanics and Biomedical Engineering, 17(16), pp.1821-1834, 2014. (ISI Journal; IF=1.2) [click here](#)
4. **Zahra Alizadeh Sani**, et al., **Automatic computation of left ventricular volume changes over a cardiac cycle from echocardiography images by nonlinear dimensionality reduction**, Journal of Digital Imaging, 28(1), pp. 91-98, 2015. (ISI Journal; IF=1.406) [click here](#)
5. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Echocardiography noise reduction using sparse representation**, Computers & Electrical Engineering, **53**, pp. 301-318, 2016. (ISI Journal; IF=1.084) [click here](#)
6. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Temporal Super Resolution Enhancement of Echocardiographic Images Based on Sparse Representation**, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, **63(1)**, pp. 6-19, 2016. (ISI Journal; IF=2.287) [click here](#)
7. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Noise reduction of echocardiographic images based on temporal information**, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, **61(4)**, pp. 620-630, 2014. (ISI Journal; IF=2.287)
8. **Zahra Alizadeh Sani**, et al., **Correlation of fragmented QRS with right ventricular indexes and fibrosis in patients with repaired tetralogy of fallot, by cardiac magnetic resonance imaging**, Published in supplement of Journal of Cardiovascular Magnetic Resonance, 17:P215, 2015. (ISI Journal; IF=5.75) [click here](#)
9. **Zahra Alizadeh Sani**, et al., **OP-116 Assessing the Relationship between Serum NT-Probnp and Left Ventricular Myocardial Viability by Cardiac MRI and Transthoracic Parameters**, Published in supplement of The American Journal of Cardiology, S51, 2015. (ISI Journal; IF=3.154) [click here](#)
10. Ahmad Shalbaf, **Zahra Alizadeh Sani**, et al., **Echocardiography without electrocardiogram using nonlinear dimensionality reduction methods**, Journal of Medical Ultrasonics, 42(2), pp.137-149, 2015. (ISI Journal; IF=0.559) [click here](#)
11. S Ghanbari, **Zahra Alizadeh Sani**, et al., **Fully automatic segmentation of left ventricle in a sequence of echocardiography images of one cardiac cycle by dynamic directional vector field convolution (DDVFC) method and manifold learning**, Biomedical Engineering: Applications, Basis and Communications, 25(2), pp.1-15, 2013. (ISI Journal; IF=0.32) [click here](#)

12. Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of coronary arteries stenosis using data mining**, J Med. Signals Sens., 2(3), pp.57-65, 2012. [click here](#)
13. Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of coronary artery disease using data mining techniques based on symptoms and ecg features**, European Journal of Scientific Research, 82(4), pp. 542-553, 2012. [click here](#)
14. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **A New Method for Pseudo-increasing Frame Rates of Echocardiography Images Using Manifold Learning**, J Med. Signals Sens., 1(2), pp.107-112, 2011. [click here](#)
15. **Zahra Alizadeh Sani**, et al., **Cardiac MRI in a patient with coincident left ventricular non-compaction and hypertrophic cardiomyopathy**, J. Tehran Heart Cent., 6(4), pp. 214-216, 2011. [click here](#)
16. **Zahra Alizadeh Sani**, et al., **Left Ventricular Apical Hypoplasia: Case Report on Cardiomyopathy and a History of Sudden Cardiac Death**, ARYA Atherosclerosis, 12(1), 2016. [click here](#)

### ❖ Conference Papers:

1. **Zahra Alizadeh Sani**, et al, **Accessory pseudo left atrium confirmed by CMR, Didactic case session III - Best submitted cases**, Euro CMR, vienna, Austria, 2014.
2. **Zahra Alizadeh Sani**, et al, **Assessing Relation of Tricuspid valve Annular Tilt Index with Right Ventricular Enlargement in Patients with Tetralogy of Fallot in Cardiac Magnetic Resonance Imaging**, Euro CMR, vienna, Austria, 2014.
3. **Zahra Alizadeh Sani**, et al., **Using Carotid-subclavian artery Index and Isthmus-descending Aorta ratio with cardiac MR for detection of coarctation**, 5th Annual European Course on Cardiovascular Magnetic Resonance, Italia, 2013.
4. **Zahra Alizadeh Sani**, et al., **Mid-term results of pulmonary valve replacement in patient with total correction of tetralogy of fallot in rajaei heart center**, Euro CMR, Wien, Austria, 2012.
5. **Zahra Alizadeh Sani**, et al., **left atrium confirmed by cardiac magnetic resonance imaging**, Euro CMR, Wien, Austria, 2012.
6. **Zahra Alizadeh Sani**, et al., **Post ST- segment elevation myocardial infarction no -reflow phenomenon; comparison between Cardiac Magnetic Resonance and angiographic measurements**, Euro CMR, Wien, Austria, 2012.
7. **Zahra Alizadeh Sani**, et al., **Magnetic Resonance Imaging abnormalities in right ventricular outflow tract tachycardia**, Euro CMR, Wien, Austria, p54, 2012.
8. Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of Coronary Artery Disease Using Cost-Sensitive Algorithms**, IEEE 12th International Conference on Data Mining Workshops; 2012. (presented by Z. Alizadeh Sani) [click here](#)
9. Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of Coronary Artery Disease Using Data Mining Based on Lab Data and Echo Features**, 2nd International Conference on Environmental, Biomedical and Biotechnology ICEBB, 2012. (Selected paper as a very excellent one), (presented by Z. Alizadeh Sani) [click here](#) [click here](#)
10. **Zahra Alizadeh Sani**, et al., **The effect of myocardial fibrosis on left ventricular diastolic function assessed by noninvasive cardiac magnetic resonance and echocardiography**, 15th Annual SCMR Scientific Sessions, Orlando, FL, USA. 2-5 Feb 2012, (presented by Z. Alizadeh Sani).
11. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Noise Reduction of Echocardiography Images Using Isomap Algorithm**, presentation in the 1st Middle East Conference on Biomedical Engineering (MECBME'11), 2011.
12. Ahmad Shalbaf, **Zahra Alizadeh Sani**, et al., **Automatic Detection of End Systole and End Diastole Within a Sequence of 2-D Echocardiographic Images Using Modified Isomap Algorithm**, presentation in the 1st Middle East Conference on Biomedical Engineering

(MECBME'11), 2011.

13. Laleh Jahanshahi, **Zahra Alizadeh Sani**, et al., **Noise Reduction In Echocardiography Images Using Contourlet Transform**, presentation in the 1st Middle East Conference on Biomedical Engineering (MECBME'11), 2011.
14. Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Automatic detection of increase in frame rate echocardiographic images using manifold learning**, Presentation in the 18th Iranian Conference on Electrical Engineering, Iran, 11-13 May 2010.
15. Saadat Ghanbari Moman, **Zahra Alizadeh Sani**, et al., **Automatic detection of end-diastole and end-systole from MRI images using manifold learning**, 18th Conference of Iranian Image Analysis, Iran, 2011.
16. Majid Kyavar, **Zahra Alizadeh Sani**, et al., **Comparison between doppler derived strain and strain rate imaging and cardiac magnetic resonance in assessing right ventricular function late after repaired tetralogy of fallot**, Euro CMR, Nice, France, 2011.
17. Laleh Jahanshahi, **Zahra Alizadeh Sani**, et al., **Noise Reduction In Echocardiography Images Using Contourlet Transform**, Presentation in 18th Conference of Iranian Image Analysis, Iran, 2011.
18. Laleh Jahanshahi, Hamid Behnam, Ahmad Shalbaf, **Zahra Alizadeh- Sani**” **Noise Reduction In Echocardiography Images Using Contourlet Transform**” Presentation in 18<sup>th</sup> Conference of Iranian Image Analysis, Iran University of Science and technology, 2011.

## ❖ US PATENT

- **Z. Alizadeh Sani**, et al. “System for determining the need for Angiography in patients with symptoms of Coronary Artery disease”, Publication date 2015/12/24, US Patent 20,150,370,996, 2015. [click here](#)

## ❖ Area of Interest

- Cardiovascular MRI, Physics, Pulse sequence, clinical application
- Cardiovascular CT Angiography, physics, technique, clinical application
- Echocardiography, physics, clinical application

## ❖ Professional Affiliations

Executive comemember of Iranian chapter (the first chapter in Asia) for ISMRM (the biggest word wild society in MRI)

[Click here](#)

Chairman of Iranian Cardiovascular MRI subchapter of Iranian Chapter for ISMRM

Persian translator of SCMR guidelines

[Click here](#)

SCMR newsletter representative to collect CMR news from China, Japan, India

Inspector of Iranian heart association

Asian Society of Cardiovascular Imaging (ASCI) representative in Iran

## ❖ Reviewer of Professional Journal

- Journal of Magnetic Resonance (International Journal)
- Iranian Heart Journal (Official Journal of the Iranian heart association)
- Iranian cardiovascular research journal
- Arya Atherosclerosis Journal
- Iranian cardiovascular imaging journal

## ❖ Teaching Experiences

- Scientific manager of the first CVMR fellowships and technologists in Iran since May 2012
- Cardiac MRI Teaching Courses (special Topics) Initiated as a Faculty of Cardiovascular Imaging and Iranian's Pioneer of CVMR at the Mashhad University of Medical Science, Iran, 2012-present
- Cardiac MRI Teaching Courses (special Topics) initiated as a Faculty of Cardiovascular Imaging and Iranian's Pioneer of CVMR at the Rajaei Cardiovascular, Medical & Research Center, Iran University of Medical Science, Iran, 2009-present.
- Scientific manager and lecturer in Cardiac MRI and cardiac CT at the Iranian Heart Congresses and most International congresses in Iran since 2009.
- Designed the curriculum of Cardiac Imaging Fellowship in Iran at the department of cardiovascular Imaging of Rajaei Cardiovascular, Medical & Research Center, 2011.

## ❖ Professional Experiences

- Sep. 1998-Sep. 2002, as a general physician in Tabas town hospitals and own office.
- Apr. 2003-Sep. 2006, working at private hospitals in Mashhad city in the field of diagnosis and therapy of Cardiovascular Diseases and Trans thoracic echocardiography (TTE)
- Sep. 2007-March 2009 as a fellowship of Echocardiography in Echocardiographic department of Rajaei Cardiovascular, Medical & Research Center, Iran University.
- March 2009-present as an associate professor of Cardiovascular Imaging in Cardiovascular Imaging department of Rajaei Cardiovascular, Medical & Research Center, Iran University Iran
- March 2012-present as an Iranian Grandfather and pioneer of cardiovascular MRI, Mashhad University of Medical Science, Iran.

## ❖ Honors

- Ranked 3th among 500000+ participants in university entrance exam for MD degree in 1991
- Ranked 58th among about 14000 graduated students (General Physicians) of 2002 Residency entrance exam
- Ranked 1 th among about 30 cardiology resident in Mashhad University (2002- 2006).
- Ranked 5th on national Board of Iranian cardiology 2006.
- Ranked 1th on the Iranian Echocardiology Fellowship in Iran University 2007.
- Certification of the Cardiovascular Magnetic Resonance examination organized by the Working Group on Cardiovascular Magnetic Resonance of the European Society of Cardiology in Nice, France on 06/02/2011 with high Percentile Score.
- Manager of curriculum of cardiovascular Imaging Fellowship in Iran since Oct-2016

## ❖ AWARDS

- Award of best submitted cases, Euro CMR congress, vienna, Austria, 2014.
- Travel grant Award, Euro CMR congress, vienna, Austria, 2014
- Prize of Association "Russian house for International Scientific and Technological Cooperation" "for the best woman's invention, Geneva, Switzerland, April 10-14, 2013.
- Diploma of Association "Russian house for International Scientific and Technological Cooperation" awarded in 41st International Exhibition of Inventions of Geneva, 10-14 April

2013, Geneva, Switzerland.

- Diploma of 41st International Exhibition of Inventions of Geneva, 12 April 2013, Geneva, Switzerland.
- Special Gold medal of 41st International Exhibition of Inventions of Geneva, 12 April 2013, Geneva, Switzerland.
- Award of Grandfather Level III certificate of CVMR in Iran from Mashhad University of Medical Science, Iran, 2013.
- Award and prize of the top physician in getting International awards, Mashhad University of Medical Science, 2013 Iran.
- Award of the best researcher in the cardiovascular Imaging science at the Rajaei cardiovascular Medical & Research Center, Tehran University of Medical science, Iran, 2011.
- Award of the best researcher in the cardiovascular Imaging science at the Rajaei Cardiovascular Medical & Research Center, Tehran university of Medical science, Iran, 2012.