

# Curriculum Vitae

## Personal Details

*Name:* Shohreh Kasaei  
*Position:* Professor  
*Date of Birth:* April 14, 1960 (Iran)  
*Address:* Department of Computer Engineering, Sharif University of Technology, Azadi Ave., Tehran, Iran. P.O. Box 11155-9517  
*Room No:* 823  
*Phone:* +98 21 6616 6646  
*Fax:* +98 21 6601 9246  
*E-Mail:* kasaei[at]sharif[dot]edu  
*Homepage:* <http://sharif.edu/~kasaei>  
*Lab. Website:* <http://ipl.ce.sharif.edu>  
*CE Website:* <http://ce.sharif.edu>  
*Last Updated:* Dec. 22, 2018

## Academic Qualifications

### Doctor of Philosophy (Ph.D.):

*Period:* Feb. 1996–Aug. 1998  
*Field of Study:* Image Processing  
*School:* Signal Processing Research Centre (SPRC), School of Electrical Engineering & Computer Science (EECS), Queensland University of Technology (QUT), Brisbane, Australia  
*Thesis Title:* Fingerprint Analysis using Wavelet Transform with Application to Compression and Feature Extraction  
*Inst. Courses:* Advanced Information Retrieval Skills, Modern Signal Processing, Digital Spectral Analysis, Pattern Recognition

### Master of Science (M.Sc.):

*Period:* April 1992– March 1994  
*Field of Study:* 3D Digital Signal Processing  
*School:* Graduate School of Engineering & Science, Department of Electrical & Electronics Engineering, University of the Ryukyus, Okinawa, Japan  
*Thesis Title:* A Design Method of 3D AR Lattice Prediction Modeling

*Inst. Courses:* Advanced Information Processing, Electrical & Information Engineering, Advanced System Engineering

### **Bachelor of Science (B.Sc.):**

*Period:* Sep. 1977–Feb. 1986

*Field of Study:* Electronic Engineering

*School:* Department of Electrical & Computer Engineering (ECE), Isfahan University of Technology (IUT), Isfahan, Iran

*Inst. Courses:* Stochastic Processes, Digital Filters, Communication Circuits, Transmission Systems, Telephone Switching Systems, Communication Theory (1,2), Numerical Analysis, Engineering Statistics & Probability, Engineering Math., General Math. (1,2,3)

### **Positions**

*Period:* Sep. 1999–Present

*Sponsor:* Sharif University of Technology, Tehran, Iran

*Position:* Full Professor

*Period:* July 2016–Sep. 2016

*Sponsor:* Santa Clara University, Santa Clara, CA

*Position:* Visiting Research Professor, Department of Electrical Engineering

*Period:* Sep. 2012–2014

*Sponsor:* Sharif University of Technology, Tehran, Iran

*Position:* Vice-Chairman of Student Affairs, Department of Computer Engineering

*Period:* Jan. 2010–Sep. 2010

*Sponsor:* Royal Institute of Technology (KTH), Stockholm, Sweden

*Position:* Guest Professor, Department of Electrical Engineering, Sound & Image Processing group

*Period:* Sep. 2004–2008

*Sponsor:* Sharif University of Technology, Tehran, Iran

*Position:* Vice-Chairman of Student Affairs, Department of Computer Engineering

*Period:* March 1995–Aug. 1998

*Sponsor:* Queensland University of Technology (QUT), Brisbane, Australia

*Position:* Research Assistant

*Period:* Oct. 1987–Dec. 1990

*Sponsor:* Amirkabir University of Technology, Tehran, Iran

*Position:* Research Assistant

*Period:* Oct. 1986–Sept. 1987

*Sponsor:* Industrial Electronic Inc., Isfahan, Iran

*Position:* Technical Manager

*Period:* 1980–1982

*Sponsor:* Isfahan University of Technology, Isfahan, Iran

*Position:* Cultural and Technical Researcher

## **Honors, Grants & Awards**

*Period:* April 2017–2022

*Sponsor:* Iranian Society of Machin Vision & Image Processing (ISMVIP)

*Field:* Elected as a member of ISMVIP Executive Committee

*Period:* Dec. 2015–Present

*Sponsor:* IEEE Iran Section

*Field:* Senior Advisor of IEEE Iran Section Executive Committee of Women in Engineering (WIE)

*Period:* Dec. 2012–2015

*Sponsor:* IEEE Iran Section

*Field:* Member of IEEE Iran Section Executive Committee of Women in Engineering (WIE)

*Period:* Nov. 2011

*Sponsor:* Machine Vision and Image Processing Conference

*Field:* Elected as the keynote speaker

*Period:* December 2010

*Sponsor:* Sharif University of Technology

*Field:* Elected as a distinguished researcher

*Period:* May 2009

*Sponsor:* Sharif University Technology

*Field:* Elected as the first Iranian female full professor in Computer Engineering (Image Analysis)

*Period:* Dec. 2009–2010

*Sponsor:* IEEE Iran Section

*Field:* Elected as the first IEEE Iran Section officer of Women in Engineering (WIE)

*Period:* March 2007

*Sponsor:* IEEE

*Field:* Elected as the first Iranian female IEEE Senior Member

*Period:* Dec. 2006–2008  
*Sponsor:* IEEE Iran Section Members  
*Field:* Elected as a member of IEEE Iran Section Executive Committee

*Period:* Oct. 2006–2008  
*Sponsor:* Sharif University of Technology  
*Field:* Elected as a member of university council

*Period:* December 2002  
*Sponsor:* Sharif University of Technology  
*Field:* Elected as a distinguished researcher

*Period:* 2002–2006  
*Sponsor:* Iran Telecommunication Research Center (ITRC)  
*Field:* Grant towards doing research on fingerprint watermarking

*Period:* August 2001  
*Sponsor:* Electronic Research Center (ERC), Sharif University of Technology  
*Field:* Award towards holding a comprehensive workshop on fingerprint identification

*Period:* 1998–1999  
*Sponsor:* Ministry of Science, Research, and Technology of Iran  
*Field:* Elected as the best Ph.D. student studied in overseas

*Period:* 1996–1998  
*Sponsor:* QUT and Police collaborative, Approved QUT/Industry collaborative  
*Field:* Grant towards doing research on fingerprint compression

*Period:* 1993–1994  
*Sponsor:* University of the Ryukyus  
*Field:* Elected as the best post–graduate student within engineering faculties

*Period:* 1992–1994  
*Sponsor:* Ministry of Science, Research, and Technology of Iran  
*Field:* Post–graduate scholarship

## **Skills**

*Computer Programming:* C, Fortran, and Assemblers  
*CAD Tools:* MATLAB, KHOROS, WaveLab, TFSA, Speed Razer, Aura, and LightWave  
*Operating Systems:* UNIX Workstation, DOS, Windows, and NT  
*Standards:* JBIG, JPEG, H.26x, and MPEG-x

*Fluent Languages:* Persian, English, and Japanese.

## **Research Interests**

Image/video processing and 3D computer vision with primary emphasis on:  
self-driving cars,  
Iran Khodro related 3D projects,  
3D reconstruction and graphical element addition in dynamic sports scenes,  
3D dynamic human action recognition,  
3D dynamic pose estimation,  
3D dynamic object tracking,  
3D object recognition,  
3D dynamic model building,  
3D virtual reality,  
3D semantic scene understanding,  
3D SLAM,  
3D video mosaicing,  
3D video super-resolution,  
scalable video coding,  
image retrieval,  
video indexing,  
face recognition,  
hyperspectral change detection,  
video restoration,  
fingerprint authentication, and  
watermarking.

## **Reviewer of Journals & Conferences**

IEEE Transactions on Image Processing (IP)  
IEEE Signal Processing Letters (SPL)  
IEE Proceedings Vision, Image & Signal Processing (IEE VIS)  
Elsevier Science: Image & Vision Computing Journal (IVC)  
The International Society for Optical Engineering (SPIE)  
Amirkabir Journal of Science & Technology (AJST)  
CSI Journal on Computer Science and Engineering (JCSE)  
Iranian Journal of Electrical & Electronic Engineers (IJEET)  
Iranian Journal of Science & Technology (IJST)  
Ferdowsi Scientific–Research Journal  
Modarres Technical & Engineering Journal (MTEJ)  
Tabriz Engineering Journal  
Research Institution for Curriculum Development & Educational Innovations (RICI)  
Iranian Conference on Electrical Engineering (ICEE)  
Computer Society of Iran Computer Conference (CSICC)  
Iranian Conference on Machine Vision, Image Processing & Applications (MVIP)

International Symposium on Telecommunications (IST)  
Conference on Intelligent Systems (CIS)  
Iranian Society of Cryptology Conference on Cryptology, Communications & Computer Security  
International Conference on Information & Knowledge Technology (IKT)  
Iranian Conference on Biomedical Engineering (ICBME)

## Constructed Courses

*Title:* *Digital Video Processing*  
*Period:* Fall 2015, Fall 2013, Fall 2010, Fall 2009, Spring 2009, Spring 2008, Spring 2007, Fall 2005, Fall 2004  
*Sponsor:* Sharif University of Technology, Tehran, Iran

*Title:* *Advanced Image Processing*  
*Period:* Fall 2008, Fall 2007, Spring 2007, Fall 2006, Spring 2006, Spring 2005, Spring 2004, Fall 2003  
*Sponsor:* Sharif University of Technology, Tehran, Iran

*Title:* *Digital Image Processing*  
*Period:* Spring 2018, Fall 2016, Spring 2016, Fall 2014, Spring 2014, Fall 2012, Fall 2011, Spring 2006, Fall 2003, Spring 2002  
*Sponsor:* Sharif University of Technology, Tehran, Iran

*Title:* *Advanced 3D Computer Vision*  
*Period:* Fall 2018, Fall 2017, Spring 2016, Spring 2015, Spring 2014, Spring 2013, Spring 2012, Spring 2011  
*Sponsor:* Sharif University of Technology, Tehran, Iran

*Title:* *Fundamentals of 3D Computer Vision*  
*Period:* Fall 2013, Fall 2012, Fall 2011  
*Sponsor:* Sharif University of Technology, Tehran, Iran

*Title:* *Signals & Systems*  
*Period:* Fall 2008, Spring 2008, Fall 2007, Fall 2006, Spring 2006, Fall 2005, Fall 2004, Spring 2004, Fall 2003  
*Sponsor:* Sharif University of Technology, Tehran, Iran

*Title:* *Scientific & Technical Presentation*  
*Period:* Fall 2018, Spring 2018, Fall 2017, Spring 2017, Fall 2016, Spring 2016, Fall 2015, Spring 2015, Fall 2014, Fall 2012, Spring 2012, Fall 2011, Spring 2011, Fall 2010, Fall 2009, Spring 2009, Fall 2008, Spring 2007, Spring 2005, Fall 2004, Spring 2004, Fall 2003, Spring 2003  
*Sponsor:* Sharif University of Technology, Tehran, Iran

## Thesis Supervision

### Supervised Ph.D. Theses:

*Name:* Afrouzian, Reza

*Project Title:* Multiview Reconstruction in Dynamic Sports Scenes

*Period:* 2010–2015

*Name:* Asadi, Maryam

*Project Title:* A Robust and Compressed Descriptor for Action Recognition using 4D Data

*Period:* 2012–2018

*Name:* Dadashi, Nasim

*Project Title:* Adaptive Registration of Endoscopic Videos to MDCT Images for Error Reduction in ENT Navigation Systems

*Period:* 2010–2015

*Name:* Dianat, Rouhollah

*Project Title:* Texture Change Detection in Hyperspectral Images

*Period:* 2004–2010

*Name:* Ershadi Nasab, Sara

*Project Title:* 3D Reconstruction of Human Pose in Multiview Dynamic Scenes

*Period:* 2010–2018

*Name:* Fooladgar, Fahimeh

*Project Title:* Supervised Semantic Segmentation of RGB-D Images

*Period:* 2013–2019

*Name:* Fotouhi, Mehran

*Project Title:* Homography Matrix Extraction for 3D Positioning of Soccer Players

*Period:* 2009–2018

*Name:* Hadavi Moghadam, Bentolhoda

*Project Title:* Porosity Estimation in Electrospun Nanofibers using 3D Image Analysis

*Period:* 2012–2018

*Name:* Hafez Kolahi, Hasan

*Project Title:* Noisy-Channel Model for Feature Extraction

*Period:* 2013–2019

*Name:* Hasanzadeh, Maryam

*Project Title:* Multispectral Fuzzy Image Segmentation  
*Period:* 2004–2009

*Name:* Jafari, Mehdi  
*Project Title:* Object-Based Adaptive Streaming of Layered-Encoded Video over the Internet  
*Period:* 2001–2007

*Name:* Lotfi, Tayebbeh  
*Name:* Mahdavi Nasab, Homayoon  
*Project Title:* Motion Estimation for Very Low Bitrate Video Compression  
*Period:* 2001–2005

*Name:* Mahmoodi, Shirin  
*Project Title:* Change Detection using Texture Analysis  
*Period:* 2004–2008

*Name:* Marvati-Zadeh, Mojtaba  
*Project Title:* Robust Target Tracking using Deep Neural Networks  
*Period:* 2015–2019

*Name:* Mohseni, Hadis  
*Project Title:* Face Recognition in Subspaces based on Nonlinear Dimension Reduction  
*Period:* 2007–2011

*Name:* Ramezanpour, Sadegh  
*Project Title:* Video Quality Improvement in a Collection of Smartphones  
*Period:* 2013–2019

*Name:* Sepehrinour, Maryam  
*Project Title:* 3D Reconstruction of Human Body from Single-View Videos  
*Period:* 2013–2019

*Name:* Zamani, Yasin  
*Project Title:* A Probabilistic Approach to 3D SLAM using RGB-D Cameras  
*Period:* 2013–2019

### **Supervised M.Sc. Theses:**

*Name:* Abadpour, Arash  
*Project Title:* Color Image Processing using Principle Component Analysis  
*Period:* 2004–2005

*Name:* Abdi, Amir Hossein  
*Project Title:* Diagnosis of Jaw Lesions in Dental Radiographs



*Period:* 2012–2013  
*Name:* Abin, Ahmad Ali  
*Project Title:* Multiface Detection and Tracking  
*Period:* 2007–2008

*Name:* Aghahian Panahi, Mohammad  
*Project Title:* Error Resilient Coding of H.264 for Wireless Networks  
*Period:* 2009–2011

*Name:* Amayeh, Gholamreza  
*Project Title:* Trademark Database Retrieval  
*Period:* 2002–2003

*Name:* Amiri, Ahmad  
*Project Title:* SLAM-based 3D Object Recognition using RGB-D Camera  
*Period:* 2016–2017

*Name:* Amiri, Hakimeh  
*Project Title:* Intraoperative Registration of Non-rigid Tissue for Image-Guided Surgery  
*Period:* 2011–2012

*Name:* Amiri, S. Mohsen  
*Project Title:* Texture Change Detection in Multispectral Images  
*Period:* 2005–2006

*Name:* Araghi, Ali  
*Project Title:* Error Concealment of H.264/AVC for Wireless Networks  
*Period:* 2009–2011

*Name:* Arbab, Mohammad  
*Project Title:*  
*Period:* 2017–2018

*Name:* Arbabi, Hossein  
*Project Title:* Motion Estimation using Complex Wavelet Transform  
*Period:* 2000–2001

*Name:* Ashkar, Nafiseh  
*Project Title:* Inserting Graphical Elements in Multiview Soccer Videos  
*Period:* 2016–2017

*Name:* Azad, Reza  
*Project Title:* 4D Hand Gesture Recognition on RGB-D Videos  
*Period:* 2016–2017

*Name:* Bagheri, Mohammad Reza  
*Project Title:* Synchronization of Multiple Videos of a Scene with Drop Possibility  
*Period:* 2015–2016

*Name:* Bagheri, Mojtaba  
*Project Title:* Multiresolution Video Mosaicing  
*Period:* 2006–2007

*Name:* Behrouzi, Javad  
*Project Title:* Wavelet-Based Digital Image Watermarking  
*Period:* 2003–2004

*Name:* Beizaei, Farzad  
*Project Title:* Human Action Recognition from RGB-D Videos using Deep Networks  
*Period:* 2018–2019

*Name:* Daliran, Soheil  
*Project Title:* Quality Improvement of Anticipated Future Videos by Unsupervised Deep Learning  
*Period:* 2017–2018

*Name:* Darabi, Ali Akbar  
*Project Title:* Hierarchical Object Segmentation to be used in Tracking  
*Period:* 2006–2007

*Name:* Darabi, Halimeh  
*Project Title:* Motion Tracking with Application to Virtual Studios  
*Period:* 2001–2002

*Name:* Dejkam, Arsalan  
*Project Title:* 3D Reconstruction of Deformable Surfaces  
*Period:* 2010–2011

*Name:* Ekhtiari, Zahra  
*Project Title:* 3D Body Pose Estimation and Tracking  
*Period:* 2014–2015

*Name:* Elyasi, Fatemeh  
*Project Title:* Detection and Tracking of Moving Objects using Multiview Cameras  
*Period:* 2013–2014

*Name:* Fatemi, Arezou  
*Project Title:* RGB-D Video Generation using GANs  
*Period:* 2018–2019

*Name:* Feiz, Shirinn  
*Project Title:* Virtual Advertisement Replacement in Multiview Soccer Video  
*Period:* 2015–2016

*Name:* Fahmi, Reza  
*Project Title:* 3D Soccer Ball Tracking with Fixed and PTZ Cameras  
*Period:* 2015–2016

*Name:* Farrokhbakht, Hossein  
*Project Title:* Implementing Particle Filtering on GPU Architecture  
*Period:* 2012–2013

*Name:* Fattahian Peiro, Hossein  
*Project Title:* Error Resilient Video Compression using H.264/AVC  
*Period:* 2007–2008

*Name:* Firusmanesh, Amir Hossein  
*Project Title:* Using H.264 Scalable Video Compression for Distance Learning  
*Period:* 2007–2008

*Name:* Feiz, Shirinn  
*Project Title:* Virtual Advertisement Replacement in Multiview Soccer Video  
*Period:* 2015–2016

*Name:* Fotouhi, Mehran  
*Project Title:* Body Skin Detection in Color Images  
*Period:* 2007–2008

*Project Title:* Real-time Graphical Elements Addition to Live and Instant Replays of Broadcast Soccer Videos  
*Period:* 2013-2014

*Project Title:* Human Action Recognition Using 3D Analysis  
*Period:* 2011-2012

*Name:* Ghaderi, Mojtaba  
*Project Title:* Local Image Sequence Restoration applied on IRIB Archive Resources  
*Period:* 2000-2002

*Name:* Ghodrati, Amir  
*Project Title:* Human Action Categorization Using Spatiotemporal Features  
*Period:* 2008–2009

*Name:* Gholami, Aminreza  
*Project Title:* Multiview Localization and Tracking of Soccer Players and Ball  
*Period:* 2011–2012

*Name:* Gholizadeh Ansari, Maryam  
*Project Title:* Face Segmentation with Application to Videotelephony Compression  
*Period:* 2001–2002

*Name:* Hadian, Mostafa  
*Project Title:* Calibration of PTZ Cameras from Multiview Soccer Match Videos  
*Period:* 2014–2015

*Name:* Hayati, Barzan  
*Project Title:* Multi-view Multi-object Tracking based on Objective Functions  
*Period:* 2016–2017

*Name:* Hosseini, Reyhaneh  
*Project Title:* Logo Detection and Removal from Videos  
*Period:* 2008–2009

*Name:* Jabalbarezzi, Elham  
*Project Title:* 3D Modeling of Soccer Players from an Arbitrary Viewpoint Using Multiview Images  
*Period:* 2011–2012

*Name:* Jamalifar, Hamed  
*Project Title:* Reference-Free Deformable Surface 3D Tracking  
*Period:* 2010–2011

*Name:* Karami, Mansoureh  
*Project Title:* 3D Reconstruction of Soccer Player using Multiview Videos  
*Period:* 2012–2013

*Name:* Karimi, Nader  
*Project Title:* Semantic Segmentation on Fusion of RGB and Depth Channels of Images using Convolutional Neural Networks  
*Period:* 2018–2019

*Name:* Karimian, Mahmoud  
*Project Title:* Video Categorization Using Semisupervised Learning  
*Period:* 2010–2011

*Name:* Khalili, Amir Hossein  
*Project Title:* Object Tracking across Uncalibrated Camera Networks  
*Period:* 2006–2007

*Name:* Khameneh, Elyas  
*Project Title:* Multiresolution Image Mosaicing  
*Period:* 2005–2006

*Name:* Khatami Nejjhad, Ahmad  
*Project Title:* 4D Human Action Recognition Using a Fixed RGB-D Camera  
*Period:* 2015–2016

*Name:* Lakdashti, Abualfazl  
*Project Title:* Design and Implementation of a Search Engine on Image Databases on the Internet  
*Period:* 2001–2002

*Name:* Mahmoudi, Ali  
*Project Title:* An Efficient Fingerprint Authentication Method  
*Period:* 2002–2003

*Name:* Mazloom, Masoud  
*Project Title:* An Efficient Method for Face Recognition  
*Period:* 2004–2005

*Name:* Merati, Amin  
*Project Title:* Object Segmentation & Tracking in Image Sequences  
*Period:* 2003–2004

*Name:* Milady, Saeed  
*Project Title:* Detection and Removal of Line Scratches in Image Sequences  
*Period:* 2001–2002

*Name:* Moghimi, Mohammad  
*Project Title:* Multiclass Visual Object Recognition based on Cluttered Images  
*Period:* 2008–2010

*Name:* Mohabbati, Bardia  
*Project Title:* Object Tracking in Image Sequences  
*Period:* 2004–2005

*Name:* Mohammadi, Maryam  
*Project Title:* Link Prediction in Bipartite Networks  
*Period:* 2015–2016

*Name:* Mohammadi Kaji, Mahsa  
*Project Title:* Visual Odometry using RGB-D Cameras  
*Period:* 2013–2014

*Name:* Mohammadi Nasiri, Rasoul  
*Project Title:* Multiview Human Tracking Using Uncalibrated Cameras  
*Period:* 2008–2009

*Name:* Mohseni, Hadis  
*Project Title:* Automatic Localization of Cephalometric Landmarks  
*Period:* 2006–2007

*Name:* Moradi, Reza  
*Project Title:* Human Action Recognition Using Expandable Graphical Models  
*Period:* 2011–2012

*Name:* Moteshaker, Zohreh  
*Project Title:* 3D Reconstruction of Soccer Players from an Arbitrary Closeup Viewpoint Using Multiview Videos  
*Period:* 2011–2012

*Name:* Panahandeh, Ghazaleh  
*Project Title:* Video Error Concealment  
*Period:* 2007–2008

*Name:* Pandeh, Hossein  
*Project Title:* Real-time Graphical Elements Addition to Live Broadcast Soccer Videos  
*Period:* 2015–2016

*Name:* Pedram, S.Monireh  
*Project Title:* Image Representation using Tensor Voting  
*Period:* 2006–2007

*Name:* PourRostami, Amin  
*Project Title:* A New Context-Based Lossless Grayscale Image Compression Method  
*Period:* 2005–2006

*Name:* Rahimi, Gholamreza  
*Project Title:* Background Modeling for Tracking Moving Objects  
*Period:* 2009–2011

*Name:* Ramazanpour, Sadegh  
*Project Title:* 3D Human Pose Estimation using Multiview Videos  
*Period:* 2012–2013

*Name:* Ranjbari, Mani  
*Project Title:* Spatial Error Concealment in H.264/AVC  
*Period:* 2006–2007

*Name:* Rashidi, Hossein  
*Project Title:* Visual Simultaneous Localization and Mapping Using an RGB-D Camera  
*Period:* 2014–2015

*Name:* Rohani, Mohammad  
*Project Title:* Applying Active Contour Model for Edge Extraction  
*Period:* 2005–2006

*Name:* Safavian, Nader  
*Project Title:* Content–Based Image Retrieval using Texture & Color Features  
*Period:* 2002–2003

*Name:* Safdarian, Soraya  
*Project Title:* Semantic Segmentation of 3D Point Clouds for Indoor Scene Understanding using Deep Convolutional Neural Networks  
*Period:* 2018–2019

*Name:* SeyedSalehi, Erfan  
*Project Title:* RGB-D Video Generation using GANs  
*Period:* 2018–2019

*Name:* ShabaniNia, Elham  
*Project Title:* Moving Vehicle Tracking Using Multi-Uncalibrated Cameras  
*Period:* 2008–2009

*Name:* Shahinfard, Elham  
*Project Title:* Digital Image Watermarking  
*Period:* 2000–2001

*Name:* Shariatzadeh, S. Mehdi  
*Project Title:* Exemplar-Based Video Completion  
*Period:* 2009–2010

*Name:* Shirzad, Hamed  
*Project Title:* RGB-D Video Generation using GANs  
*Period:* 2018–2019

*Name:* Soleimani Baghshah, Mahdieh  
*Project Title:* Fuzzy–Based Recognition and Learning of Online Isolated Persian Characters  
*Period:* 2004–2005

*Name:* Souri, Yasser  
*Project Title:* Fine-Grained Image Classification  
*Period:* 2014–2015

*Name:* Taghaddosi, Mohsen  
*Project Title:* 3D Mosaicing Using Multiview Videos  
*Period:* 2011–2012

*Name:* Tavakkoli, Alireza  
*Project Title:* Object-Based Video Compression  
*Period:* 2002–2003

*Name:* Tavassolipour, Mostafa  
*Project Title:* Extraction of Important Events in Football Videos Using Video Summarization Techniques  
*Period:* 2010–2011

*Name:* Zarean, Ali  
*Project Title:* Free-viewpoint Soccer Match Video from Overlapping Cameras  
*Period:* 2014–2015

### **Supervised B.Sc. Theses:**

*Name:* Abbaspour Tehrani, Mehdi  
*Project Title:* Detection of Left Ventricular Boundaries in MR Images  
*Period:* 2011–2012

*Name:* Abbaspour, Mohsen  
*Project Title:* Restoration of Noisy and Blurred Image Sequences  
*Period:* 2001–2002

*Name:* Ahmadian, Safa  
*Project Title:* Human Action Recognition using Skeleton Data  
*Period:* 2016–2017

*Name:* Allahverdi, Kamyar  
*Project Title:* Using Computer Vision Methods to Improve Presentation Facilities  
*Period:* 2012–2013

*Name:* Arab, Ali  
*Project Title:* Camera Calibration Using Field Model for Soccer Match Videos  
*Period:* 2013–2014

*Name:* Attaran Rezaei, Behnam  
*Project Title:* Fingerprint Ridge Extraction & Thinning  
*Period:* 2000–2001

*Name:* Azari, Ali  
*Project Title:* Fingerprint Classification  
*Period:* 2000–2001

*Name:* Bagheri, Mohammad Reza  
*Project Title:* Synchronization of Multiple Videos of a Scene with Drop Possibility



*Period:* 2016–2017  
*Name:* Behzadi, Mitra  
*Project Title:* A New Image Registration Method in Elastix Toolbox  
*Period:* 2013–2014

*Name:* Bokharaie, Simin  
*Project Title:* Video Compression based on Object Recognition  
*Period:* 2002–2003

*Name:* Bozorgpour, Afshin  
*Project Title:* Automatic Homography Extraction and Tracking in Soccer Scenes  
*Period:* 2014–2015

*Name:* Emad Marvasti, Amir  
*Project Title:* Object Tracking by Particle Filtering Using Environment Geometrical Features  
*Period:* 2013–2014

*Name:* Emad Marvasti, Ehsan  
*Project Title:* Object Tracking by Particle Filtering Using Environment Geometrical Features  
*Period:* 2013–2014

*Name:* Esmaeilnejhad, Jamshid  
*Project Title:* A General Graph-Embedding-Based Framework for Dimension Reduction  
*Period:* 2011–2011

*Name:* Esmaeelani, Leila  
*Project Title:* Video Compression using 3-D Wavelet Transform  
*Period:* 2002–2003

*Name:* Forghani, Hossein  
*Project Title:* Vision-Based 3D Object Recognition  
*Period:* 2013-2014

*Name:* Foroughipour, Ali  
*Project Title:* 3D Surface Reconstruction of Brain from MR Images  
*Period:* 2012-2013

*Name:* Fouladi, Sadjad  
*Project Title:* Color Correction in Mosaiced Images of Soccer Matches  
*Period:* 2012

*Name:* Ghane, Ali Reza

*Project Title:* Color Histogram-Based Image Retrieval from Databases under MPEG7 Standard

*Period:* 2005–2006

*Name:* Ghassemzadeh, Mona

*Project Title:* Content-Based Image Retrieval using Color and Texture Features

*Period:* 2001–2002

*Name:* Gherailu, Hadi

*Project Title:* Shot Change Detection in Image Sequences

*Period:* 2001–2002

*Name:* Ghotbi, Mohammad Mehdi

*Project Title:* Investigating Different Multispectral Image Registration Methods

*Period:* 2007–2008

*Name:* Ghoudarzi, Mohsen

*Project Title:* Structural Analysis and Character Recognition for Iranian License Plate Recognition

*Period:* 2004–2005

*Name:* Hajimoradlou, Ainaz

*Project Title:* Feature Extraction from RGB-D Images for Semantic Segmentation

*Period:* 2016–2017

*Name:* Hashemi, Hooman

*Project Title:* Inference of Support Relations on RGB-D Images for Semantic Segmentation

*Period:* 2016–2017

*Name:* Lesani, Majid

*Project Title:* A New Method for Iranian License Plate Localization

*Period:* 2004–2005

*Name:* Karimifar, Shirin

*Project Title:* Content-Based Image Retrieval using Shape Features

*Period:* 2001–2002

*Name:* Khodabandeh, Mehran

*Project Title:* Analyzing Feature Extraction Methods for Gender Detection from Face Images

*Period:* 2012–2012

*Name:* Lotfian, Sina

*Project Title:* Calculating Inter-Frame Homography Matrixes for PTZ Cameras in Soccer Matches

*Period:* 2013–2014  
  
*Name:* Khabbazian, Mohammad Hasan  
*Project Title:* Statistical Models of Digital Images  
*Period:* 2006–2007  
  
*Name:* Mahdieh, Mahdis  
*Project Title:* Dress Mapping on Query Body from 4 Points of View Using 3D Computer Vision  
*Period:* 2012–2012  
  
*Name:* Mazaheri, Amir  
*Project Title:* Model-based Human Pose Estimation from Multiview Videos  
*Period:* 2012–2013  
  
*Name:* Moghimi, Mehrdad  
*Project Title:* Virtual Advertisement Replacement in Soccer Fields  
*Period:* 2018–2019 3  
  
*Name:* Mohammadi, Maryam  
*Project Title:* An Improved GM-PHD Filter for Multiple Target Tracking  
*Period:* 2012–2013  
  
*Name:* Mohammadi Kaji, Mahsa  
*Project Title:* Glioma Diagnosis and Follow up Using MR Images  
*Period:* 2012–2012  
  
*Name:* Mohammadi Nasiri, Rasoul  
*Project Title:* Object Motion Parameter Estimation in 3D Space  
*Period:* 2007–2008  
  
*Name:* Mohsennia, Arsalan  
*Project Title:* 3D Reconstruction of Body Tissue Structures from Biomedical Videos using ASKC  
*Period:* 2012–2012  
  
*Name:* Montazeri, Zahra  
*Project Title:* Visual Odometry using RGB-D Cameras  
*Period:* 2013–2014  
  
*Name:* Naghian, Mohammad  
*Project Title:* Detection of Left Ventricular Boundaries in MR Images  
*Period:* 2011–2012  
  
*Name:* Najafzadeh, Nima  
*Project Title:* Multi-Target 3D Tracking

*Period:* 2013–2014  
*Name:* Norouzi, Narges  
*Project Title:* Dress Mapping on Query Body from 4 Points of View Using 3D Computer Vision  
*Period:* 2012–2012

*Name:* Osia, Ali  
*Project Title:* Human Body Pose Estimation Using 3D Point Cloud  
*Period:* 2013–2014

*Name:* Pakbaznia, Ehsan  
*Project Title:* Fingerprint High–Level Classification  
*Period:* 2000–2001

*Name:* Rahimi, Mohammad Reza  
*Project Title:* Fingerprint High–Level Classification  
*Period:* 2000–2001

*Name:* Raissi Dehkordi, Vahid  
*Project Title:* Still Image Compression using Wavelet Transform  
*Period:* 2001–2002

*Name:* Sabouri, Anooshirvan  
*Project Title:* Rigid Object Motion Tracking  
*Period:* 2002–2003

*Name:* Sadeghi, Mohammad Amin  
*Project Title:* Real-time Multiview Face Detection  
*Period:* 2009–2010

*Name:* Safaei Pour, Morteza  
*Project Title:* Reducing Registration Error between CT and Ultrasound Images  
*Period:* 2012–2013

*Name:* Safarian, Soraya  
*Project Title:* Semantic Segmentation of 3D Point Clouds for Indoor Scene Understanding using Deep Convolutional Neural Networks  
*Period:* 2018–2019

*Name:* Salahshour, Mojgan  
*Project Title:* Template Matching & Reconstruction in Sport Scenes with Different View Angles  
*Period:* 2002–2003

*Name:* Salarifard, Raziieh

*Project Title:* Robust Features Extraction for Content-based Video Classification  
*Period:* 2012–2012

*Name:* Salimi, Shima  
*Project Title:* Model-based Human Pose Estimation from Multiview Videos  
*Period:* 2012–2013

*Name:* Samadian, Alireza  
*Project Title:* Player Super-resolution in Soccer Videos  
*Period:* 2016

*Name:* Samie, Farzad  
*Project Title:* Radiometric Correction & Normalization of Satellite Images  
*Period:* 2007–2008

*Name:* Shariatmadari, Zeinab  
*Project Title:* Change Detection using Hyperspectral Images  
*Period:* 2004–2005

*Name:* Taghavi Nasrabadi, Zeinab  
*Project Title:* Wavelet Transform Specifications in Image Sequences  
*Period:* 2001–2002

*Name:* Tajik, Kimia  
*Project Title:* 3D Reconstruction of Sinuous Using Endoscopy Images  
*Period:* 2012–2012

*Name:* Tahmasebi, Amir Mohammad  
*Project Title:* Enhancement & Foreground/Background Segmentation of Fingerprint Images  
*Period:* 2000–2001

*Name:* Tavakkol, Arash  
*Project Title:* Watermarking of Fingerprint Images  
*Period:* 2004–2005

*Name:* Yadollahi, Ali  
*Project Title:* Image Retrieval from Database based on an Arbitrary Query  
*Period:* 2012–2012

*Name:* Vahdani, Elahehi  
*Project Title:* Ball Detection in Soccer Match Videos  
*Period:* 2013–2014

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