

Curriculum Vitae

Personal Details

Name: Shohreh Kasaei
Position: Professor of Image Processing
Director of Image Processing Lab (IPL)
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Homepage: <https://sharif.edu/~kasaei>
Lab. Website: <http://ipl.ce.sharif.edu>
CE Website: <https://ce.sharif.edu>
Virtual Class: <https://vc.sharif.edu/kasaei>
Last Updated: March 07, 2024

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 2021
Sponsor: International Conference of Pattern Recognition and Image Analysis
Field: Elected as the keynote speaker

Period: Nov. 2011
Sponsor: Machine Vision and Image Processing Conference
Field: Elected as the keynote speaker

Period: Dec. 2010
Sponsor: Sharif University of Technology
Field: Elected as a distinguished researcher

Period: March 2009
Sponsor: IEEE Iran Section
Field: Elected as the first IEEE Iran Section officer of Women in Engineering (WIE)

Period: May 2009
Sponsor: Sharif University Technology
Field: Elected as the first Iranian female full professor in Computer Engineering (Image Analysis)

Period: March 2007
Sponsor: IEEE
Field: Elected as the first Iranian female IEEE Senior Member

Period: Dec. 2006
Sponsor: IEEE Iran Section Members
Field: Elected as the first Iranian female member of IEEE Iran Section Executive Committee

Period: Oct. 2006
Sponsor: Sharif University of Technology

Field: Elected as a member of university council

Period: Dec. 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: Aug. 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

Service Activities

Period: Jan. 2023–Present
Sponsor: Sharif University of Technology
Field: Chief Editor of Science and Computer Engineering Branch of International Journal of Scientia Iranica

Period: Jan. 2023–Present
Sponsor: Academy of Sciences of Iran
Field: Honorary Member of Electronics and Computer Engineering Branch

Period: Jan. 2021–Present
Sponsor: Academy of Persian Language and Literature of Iran
Field: Honorary Member of Image Processing and Computer Vision Branch

Period: Nov. 2018–Dec. 2022
Sponsor: Sharf University of Technology
Field: Member of Employment and Scientific Committee of the Department of Computer Science and Engineering

Period: March 2019
Sponsor: Iranian Society of Machine Vision & Image Processing (ISMVIP)
Field: Scientific Committee Chair of IPRIA 2019

Period: Sep. 2018–Present
Sponsor: Amirkabir International Journal of Electrical & Electronics Engineering (AUT-JEE)
Field: Editorial Board Member

Period: Sep. 2018–Present
Sponsor: Iranian Journal of Information Systems & Telecommunication (JIST)
Field: Editorial Board Member

Period: Sep. 2017–Present
Sponsor: Iranian Journal of Electical and Electronic Engineering (IJEED)
Field: Editorial Board Member

Period: April 2017–2020
Sponsor: Iranian Society of Machine Vision & Image Processing (ISMVIP)
Field: Vice President

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: Aug. 2009–Present
Sponsor: Sharif University of Technology
Field: Author of Singal Processing Glossary

Period: March 2009–Feb. 2010
Sponsor: IEEE Iran Section
Field: WIE Officer of IEEE Iran Section

Period: Dec. 2008–2010
Sponsor: Computer Society of Iran Members

Field: Member of Computer Society of Iran (CSI) Executive Committee

Period: Dec. 2006–2008

Sponsor: IEEE Iran Section

Field: Member of IEEE Iran Section Executive Committee

Period: Oct. 2006–2008

Sponsor: Sharif University of Technology

Field: Member of University Council

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:

3D semantic segmentation,
3D adversarial attack and defense,
point cloud classification,
adversarial knowledge distillation,
autonomous driving cars,
virtual/augmented reality,
dynamic 3D pose estimation,
dynamic 3D action recognition,
multi-resolution texture analysis,
scalable video coding, image retrieval,
video indexing,
face recognition,
hyperspectral change detection,
video restoration, and
fingerprint authentication.

Constructed Courses

Title: *Digital Image Processing*

Period: Spring 2024, Spring 2023, Spring 2022, Spring 2021, Spring 2020, Spring 2019, 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 2023, Fall 2022, Fall 2021, Fall 2020, Fall 2019, Fall 2018, Fall 2017, Spring 2016, Spring 2015, Spring 2014, Spring 2013, Spring 2012, Spring 2011

Sponsor: Sharif University of Technology, Tehran, Iran

Title: *Scientific & Technical Presentation*

Period: Spring 2024, Spring 2023, Fall 2022, Spring 2022, Fall 2021, Spring 2021, Fall 2020, Spring 2020, Fall 2019, Spring 2019, 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

Title: *Fundamentals of 3D Computer Vision*

Period: Fall 2023, Spring 2016, Fall 2015, Fall 2014, Fall 2013, Fall 2012, Fall 2011

Sponsor: Sharif University of Technology, Tehran, Iran

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: *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

Thesis Supervision

Supervised Ph.D. Theses:

Name: Afrouzian, Reza

Project Title: Multiview Reconstruction in Dynamic Sports Scenes

Period: 2010–2015

Name: Arefi, Farnoosh
Project Title: Video Instance Segmentation via Deep Spatio-temporal Embedding and Clustering
Period: 2020–2025

Name: Asadi, Maryam
Project Title: A Robust and Compressed Descriptor for Action Recognition using 4D Data
Period: 2012–2019

Name: Badali, Elaheh
Project Title:
Period: 2023–2028

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: Dinashi, Kimia
Project Title:
Period: 2021–2026

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: 2013–2020

Name: Fotouhi, Mehran
Project Title: Homography Matrix Extraction for 3D Positioning of Soccer Players
Period: 2009–2019

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: 2013–2022

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: 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: 2015–2021

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

Name: Naderi, Hanieh
Project Title: Adversarial Attacks on Deep Neural Networks
Period: 2016–2022

Name: Sepehrinour, Maryam
Project Title: 3D Reconstruction of Human Body from Single-View Videos
Period: 2013–2020

Name: Yasamani, Zeinab
Project Title:
Period: 2023–2028

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: Aghababazadeh, Arash
Project Title: Self-Supervised Disentangled Image Representation Learning
Period: 2019–2021

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

Name: Ahmadi, Rozhan
Project Title: Weakly Supervised Semantic Segmentation Using Deep Neural Networks
Period: 2022–2023

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: 2018–2020

Name: Chaichi, Arash
Project Title: Trainable Loss Weights for Image Super-Resolution
Period: 2021–2022

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: Firoosmanesh, 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

Name: Fouladi, Sadjad

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

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

Name: Ghafouri, Masoud
Project Title: An Efficient Network for Real-Time Semantic Segmentation
Period: 2022-2023

Name: Ghelichkhan, Zahra
Project Title: Semantic Segmentation Considering Correlation with RGB-D Data using CNNs
Period: 2019-2021

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: Hamidi, Hassan
Project Title: Point Cloud Semantic Segmentation with Limited Supervision using Deep Neural Networks
Period: 2021-2022

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: Jabalbarez, 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: Javid, Narges
Project Title: Weakly Supervised Semantic Segmentation
Period: 2022–2023

Name: Karimi, Ali
Project Title: Gait Recognition Using Deep Neural Networks
Period: 2023–2024

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: 2018–2020

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

Name: Khairi, Masoud
Project Title: Weakly Supervised Semantic Segmentation using Deep Neural Networks
Period: 2019–2021

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 Nejhad, 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: Mansourian, Amir Mohammad
Project Title: Deep Multi-Object Tracking by Part-Based Re-Identification in Soccer Matches
Period: 2022–2023

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

Name: Mehabadi Mohamadi, Mohamad
Project Title: Improving Robustness of Deep Neural Networks against Adversarial Examples in Images
Period: 2019–2021

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: Moradzadeh, Mehrab
Project Title: Creating Immunohistochemical Images from Hematoxylin-eosin Images in Pathology using Deep Learning
Period: 2023–2024

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: Ramazanian, Vida
Project Title: Supervised Monocular Depth Estimation using Deep Neural Networks
Period: 2022–2023

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: Sadeghi, Aryan
Project Title: Multi-Sensor Data Fusion with Deep Learning
Period: 2020–2022

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, Mahdiah
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: Taherian, Alireza
Project Title: Contrastive Learning from Medical Image and Text
Period: 2023–2024

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:* AliMohammadZadeh, Hamed
Project Title: Multi-Modal Image Detection by Improving Neural Network Learning
Period: 2021
- Name:* Allahverdi, Kamyar
Project Title: Using Computer Vision Methods to Improve Presentation Facilities
Period: 2012–2013
- Name:* Amani, Mahsa
Project Title: Brain Tumor Segmentation using Deep Neural Networks
Period: 2022
- Name:* Amani Afshar, Sepehr
Project Title: Extracting Class-Specific Attention Maps for Weakly Supervised Semantic Segmentation Using Vision Transformers
Period: 2023
- Name:* Arab, Ali
Project Title: Camera Calibration Using Field Model for Soccer Match Videos
Period: 2013–2014
- Name:* Arya, Atrin
Project Title: Adversarial Attack and Defense on 3D Point Cloud
Period: 2020–2021
- 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: Ebrahimi, Ghazal
Project Title: Adversarially Robust Self-Distillation
Period: 2020–2021

Name: Ehsani, Hanieh
Project Title: Optical Flow Approximation by Deep Neural Networks
Period: 2022

Name: Elahimanesh, Sina
Project Title: Persian Twitter Analysis: How much are people similar to their virtual character?
Period: 2023

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: Eshagh, Abolfazl
Project Title:
Period: 2024

Name: Eslami, Navid
Project Title: Optical Flow by Deep Learning

Period: 2023
Name: Esmailnejhad, 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: EsmailAkhoondy, Pooya
Project Title: Multi-Object Tracking by Person Re-Identification
Period: 2023

Name: Etemadi, Ariana
Project Title: Defense Against Adversarial Attacks on Point Cloud by Diminishing High-Frequency Components
Period: 2021–2022

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

Name: Feizi, Arash
Project Title: Image Segmentation with RGB-D Data Using GANs
Period: 2018-2019

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: Gharehdaghi, Yeganeh

Project Title: Multi-Sensor Data Fusion with Deep Learning in Image Processing Applications
Period: 2021

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: Ghorbanii, Mahdi
Project Title: Adversarial Knowledge Distillation for Image Classification and Semantic Segmentation
Period: 2020–2021

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: Goli, Leili
Project Title: Unrestricted Adversarial Attack and Defense on Deep Convolutional Neural Networks based on Geometric Transformations
Period: 2020–2021

Name: Hadizadeh, Fatemeh
Project Title: Unpaired Image-to-Image Translation
Period: 2021

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: Honarvar, Alireza
Project Title: Knowledge Distillation for Real-Time Semantic Segmentation

Period: 2023
Name: Hosseinzadeh, Mehran
Project Title: Adversarial Attack and Defense in Semantic Segmentation of RGB-D Images
Period: 2020–2021

Name: Jahanzad, Soroush
Project Title: Self-Supervised Domain Adaptation in Point Cloud Reconstruction
Period: 2023

Name: Jalali, Arya
Project Title: Knowledge Distillation in Semantic Segmentation
Period: 2023

Name: Jarollahi, Sayeh
Project Title: Improving 2D Semantic Segmentation using Knowledge Distillation
Period: 2024

Name: Jamali, Nima
Project Title: Defense Against 3D Adversarial Point Clouds Using Nearest-Neighbor Search
Period: 2021

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: Lesani, Majid
Project Title: A New Method for Iranian License Plate Localization
Period: 2004–2005

Name: Lotfian, Mahdi
Project Title: Knowledge Distillation in Computer Vision Models for Semantic Segmentation
Period: 2024

Name: Lotfian, Sina
Project Title: Calculating Inter-Frame Homography Matrixes for PTZ Cameras in Soccer Matches
Period: 2013–2014

Name: Khabbazzian, Mohammad Hasan
Project Title: Statistical Models of Digital Images
Period: 2006–2007

Name: Mahdavi, Mobina
Project Title: Supervised Semantic Segmentation of 3D Point Clouds
Period: 2019-2020

Name: Mahdavifar, Ali
Project Title: Muti-View Process of Point-Cloud Data
Period: 2024

Name: Mahdiah, Mahdis
Project Title: Dress Mapping on Query Body from 4 Points of View Using 3D Computer Vision
Period: 2012–2012

Name: Maleki, Banyamin
Project Title: 3D Data Style Transfer
Period: 2024

Name: Maleki, S. Arad
Project Title: 3
Period: 2024

Name: Mazaheri, Amir
Project Title: Model-based Human Pose Estimation from Multiview Videos
Period: 2012–2013

Name: Mikaeili, Aryan
Project Title: Geometric Interpretability of 3D Deep Neural Networks
Period: 2020–2021

Name: Moghimi, Mehrdadr
Project Title: Virtual Advertisement Replacement in Soccer Fields
Period: 2018–2019

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 Khani, Mohammad Ali
Project Title: Persian Twitter Analysis: How much are people similar to their virtual character?
Period: 2023

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: Moradi, Maryam
Project Title: Robustness of Deep Neural Networks to Adversarial Examples
Period: 2020–2021

Name: Naghian, Mohammad
Project Title:
Period: 2011–2012

Name: Najafi, S. Mohammad Yousef
Project Title:
Period: 2024

Name: Najafzadeh, Nima
Project Title: Multi-Target 3D Tracking
Period: 2013–2014

Name: Namdar, Mohammad
Project Title: Motion Capture from Video
Period: 2023

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

Name: Noorbakhsh, Kimia
Project Title: Robustness Improvement of 3D Deep Neural Networks Against Adversarial Attacks by Training with Denoised Data

Period: 2021-2022
Name: Osia, Ali
Project Title: Human Body Pose Estimation Using 3D Point Cloud
Period: 2013–2014

Name: Pajoum, Barbod
Project Title: 3D Point Cloud Segmentation using Generative Adversarial Network
Period: 2020–2021

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

Name: Rafiei, Ainaz
Project Title: Supervised Monocular Depth Estimation using Deep Neural Networks
Period: 2023

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: Erfan, Sadraiyeh
Project Title:
Period: 2024

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: Saghi, Zeinab Sadat
Project Title: Image Classification by Neural Networks under Domain Change
Period: 2021

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

Name: Salarifard, Razieh
Project Title: Robust Features Extraction for Content-based Video Classification
Period: 2012–2012

Name: Salehi, Emad
Project Title: Multi-Sensor Data Fusion by Deep Learning in 3D Object Detection
Period: 2021

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

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

Name: Sharifi, Parsa
Project Title: Contrastive Learning from Medical Image and Text
Period: 2024

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

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: Teimouri, Parshan
Project Title: Multi-Sensor Data Fusion Effect on Scene Perception using Deep Learning
Period: 2021

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

Name: VahidiMajd, Rezai
Project Title: Knowledge Distillation in Computer Vision Models for Semantic Segmentation
Period: 2024

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

Name: Zahedi, Sara
Project Title: FashionFlow: Intelligent Outfit Recommendation
Period: 2023–2024

Name: Zargarzadeh, Sahar
Project Title: Semantic Segmentation of 3D Point Cloud Using RGB-D Data
Period: 2019–2020

Name: Zohri, Alireza
Project Title: Developing an Augmented Reality Software for Navigation Systems
Period: 2019–2020

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