

Soheil Mehralian

Current Address:
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RESEARCH INTERESTS

- Data Mining and Big Data
- Machine Learning
- Statistical Pattern Recognition
- Computer Vision
- Image Processing
- Optimization

EDUCATION

- **Ph.D.:** Artificial Intelligence, Department of Computer Engineering , K. N. Toosi University of Technology, 2018 (Expected!)
- **MSc.:** Artificial Intelligence, Department of Electrical and Computer Engineering, Isfahan University of Technology (IUT), 2013.
- **BSc.:** Software Engineering, Department of Electrical, Computer and IT Engineering, Azad University of Qazvin (QIAU), 2010.

PROGRAMMING LANGUAGES

- C, C++, C#, Java, MATLAB, R, Python.

TEACHING EXPERIENCES

- Isfahan University of Technology, Spring 2011, Fall 2011.
- Technical College of Qazvin, Fall 2012, Spring 2013.
- Islamic Azad University, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014.
- Alame Dehkhoda Institute, Fall 2013, Spring 2014, Fall 2014.

PROJECT EXPERIENCES

- **Test Sheet Scoring Software (0010) :** A software that takes an answer sheet as input and scores it, I did it as my internship, 2007
- **Parakeet:** A Software like Yahoo! Messenger for LAN, consist of a server-side console software and client-side interface, My BSc. Final Project, 2010
- **Arsenal! :** Inventory management software , 2010
- **Video Google:** Implementation of a video search system using SIFT, 2011.

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- **Kavosh:** A Submarine robot designed for ROV¹ league of *IranOpen (2011, 2012)* Robotic Competition, 2011-2012.
 - *With AI Lab. Of ECE Dept. and Subsea R & D Center*
- **Tiz-Ro:** A smart car designed at the AI Lab. of ECE dept. of IUT and programmed in C# and GCC/Linux, 2012.
- Design an Implementation of a real-time human detection system for C6455 TI embedded processor, Roshd Research Group, 2014.

AWARDS AND HONORS

- **1st Rank**, Practical and Scientific Olympiad in north-west of Iran (six Province), 2004, Sanandaj, Iran.
- **5th Rank**, nation-wide Practical and Scientific Olympiad, 2004, Mashhad, Iran.
- **Silver Medal**, National Skill Contest in Qazvin Province, 2004, Qazvin, Iran.
- One of **Top 10** youths of Takestan County, 2004.
- Member of TCQ Scientific team for Shiraz Colleges Olympiad, Rank: 24/105, 2007, Shiraz, Iran.
- **6th Rank** in Entrance Exam of Islamic Azad University, 2008
- **2nd Rank** in QIAU internal programming Contest, 2009, Qazvin, Iran.
- Member of Azad University of Qazvin ICPC Programming team for 11th ACM-ICPC contest of Tehran Site, 2009, Sharif University of Technology, Tehran, Iran.
- **10th Rank** in MSc. Entrance Exam of Azad University of Qazvin (Not Attended!), 2010.
- Member of AI Lab. and Kavosh Robotic team representing the ECE Department of IUT in:
 - Iran Open 2011 (Disqualified!), Tehran, Iran.
 - Iran Open 2012 (**5th Rank**), Tehran, Iran.

PUBLICATIONS

◦ Journal Papers

- **S. Mehralian**, M. Palhang, “BAG: Bi-level Analysis of Gradient Distribution for Pedestrian Detection”, Submitted to *International Journal Of Information And Communication Technology Research*, 2014.

◦ Conference Papers

- **S. Mehralian**, M. Palhang, “Pedestrian Detection using Principal Components Analysis of Gradient Distribution”, In *Proceedings of 8th conference on Machine Vision and Image Processing (MVIP2013)*, Zanjan, Iran, September 2013.

¹ Remote Operating Vehicle (Submarine)

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- M. K. Farahani, **S. Mehralian**, “Comparison Between Artificial Neural Network and Neuro-Fuzzy for Gold Price Prediction”, In *Proceedings of 13th Iranian Conference on Fuzzy Systems (IFSC2013)*, Qazvin, Iran, August 2013.
- **S. Mehralian**, M. Palhang, “Gradient Distribution Principal Components for Aerial Image Segmentation”, In *Proceedings of 11th Iranian Conference on Intelligent Systems (ICIS2013)*, Tehran, Iran, February 2013.
- H. Hemmaty, **S. Mehralian**, M. K. Farahani, R. Hejazi, “Fuzzy Data Envelopment Analysis with expected value approach and ranking using Genetic Algorithm”, In *Proceedings of 5th International Conference of Iranian Operations Research Society (ICIORS’12)*, Tabriz, Iran, May 2012
- **Thesis**
 - S. Mehralian, “A New PCA-Based Method for Pedestrian Detection in Images”, Isfahan University of Technology, Isfahan, Iran, January 2013.
- **Lectures**
 - *Advanced Programming I,II*, Technical College of Qazvin, 2012-2013.
 - *Special Topics in Computer*, Technical College of Qazvin, 2012.
 - *Database Design*, Alameh Dekhoda Non-Profit Institute, 2014.
 - *Computer Vision (Co-author)*, Isfahan University of Technology, 2011.

MEMBERSHIPS

- Member of Iranian Society of Machine Vision and Image Processing (ISMVIP)
- Member of Intelligent Systems Scientific Society of Iran (ISSSI)

CONFERENCES REFEREE

- International Symposium on Artificial Intelligence and Signal Processing (AISP 2015)
- Computer Society of Iran Computer Conference (CSICC 2015)