Amir Salarpour

Date: August 2023
Address: Pittsburgh, PA, USA
Cell Phone: +1 (913) 602-9519
Email: amir.salarpour@gmail.com
a.salarpo@andrew.cmu.edu
Website: https://asalarpour.github.io/

Research Interests

Point cloud Classification and Segmentation, Point Cloud Registration, Object Detection and Recognition, Deep Learning.

Research Experience

2023-	Research Visitor, Carnegie Mellon University, PA, USA.
Summer 2019	Research Visitor, Federal University of Rio Grande do Sul, Brazil.
2018- 2022	Assistant Professor, Sirjan University of Technology, Iran.
2015	Research Visitor, University of Missouri, MO, USA.

Education

2012- 2018	Ph.D. in Artificial Intelligence, Bu-Ali Sina University, Hamedan, Iran.
2008- 2011	M.Sc. in Artificial Intelligence, Bu-Ali Sina University, Hamedan, Iran.
2003- 2008	B.Sc. in Computer Software, Bahonar University of Kerman, Iran.

Teaching Experience

2022- 2023	Machine Learning, Sirjan University of Technology, Iran.
2022- 2023	Introduction to Image Processing, Sirjan University of Technology, Iran.
2018- 2023	Algorithm Design and Analysis, Sirjan University of Technology, Iran.
2018- 2023	Advanced Programming, Sirjan University of Technology, Iran.
2018- 2023	Artificial Intelligence, Sirjan University of Technology, Iran.

Publications

Mohammadi, Younes, **Amir Salarpour**, and Roberto Chouhy Leborgne. "Comprehensive strategy for classification of voltage sags source location using optimal feature selection applied to support vector machine and ensemble techniques." International Journal of Electrical Power & Energy Systems **(2021)**.

Peyghambarzadeh, SM Moein, Fatemeh Azizmalayeri, Hassan Khotanlou, and **Amir Salarpour**. "Point-PlaneNet: Plane kernel based convolutional neural network for point clouds analysis." Digital Signal Processing **(2020)**.

Salarpour, Amir, and Hassan Khotanlou. "Line-Segment based Trajectory Similarity Measure using Time Warping Technique." TABRIZ JOURNAL OF ELECTRICAL ENGINEERING **(2019)**.

Salarpour, Amir, and Hassan Khotanlou. "Direction-based similarity measure to trajectory clustering." IET Signal Processing **(2018)**.

Azizmalayeri, Fatemeh, SM Moein Peyghambarzadeh, Hassan Khotanlou, and **Amir Salarpour**. "Kernel Correlation Based CNN for Point Cloud Classification Task." In 2018 8th International Conference on Computer and Knowledge Engineering (ICCKE), IEEE, **(2018)**.

Salarpour, Amir, and Hassan Khotanlou. "An Empirical Comparison of Distance Measures for Multivariate Time Series Clustering." International Journal of Engineering **(2018)**.

Salarpour, Amir, Hassan Khotanlou, Mohammad Amin Mahboubi, and Saleh Daghigh. "A multiresolution approach to trajectory description." In 2017 3rd International Conference on Pattern Recognition and Image Analysis (IPRIA), pp. 62-68. IEEE, **(2017)**.

Fadaei, Abbas, Allahyar Gorbanpour, and **Amir Salarpour**. "Optimizing the Parameters Contributing to Riveting Quality Using Imperialist Competitive Algorithm and Predicting the Objective Function via the Three Models MLR, RBF, and ANN-GA." ADMT Journal **(2016)**.

Aliabadi, Mohsen, Rostam Golmohammadi, Hassan Khotanlou, Muharram Mansoorizadeh, and **Amir Salarpour**. "Artificial neural networks and advanced fuzzy techniques for predicting noise level in the industrial embroidery workrooms." Applied Artificial Intelligence **(2015)**.

Salarpour, Amir, Enayat Rahmatnejad, and Hassan Khotanlou. "Modelling broilers' abdominal fat in response to dietary treatments." Journal of animal physiology and animal nutrition 99, no. 2 **(2015)**.

Salarpour, Amir, Hassan Khotanlou, and Nikolaos Mavridis. "Long-term estimation of human spatial interactions through multiple lasers ranging sensors." In 2014 International Conference on Robotics and Emerging Allied Technologies in Engineering (iCREATE), IEEE, **(2014)**.

▬▬▬▬ Mentoring

Assisted five graduate students in advancing their research projects and developing thesis proposals at the Sirjan university of Technology in Iran.

Provided mentorship to 20 undergraduate students as they worked on their final projects at the Sirjan university of Technology in Iran.

▬▬▬▬ Services

Reviewer

- IEEE Transactions on Image Processing
- IEEE Transactions on Automation Science and Engineering
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Consumer Electronics
- IEEE Signal Processing Letters
- IEEE Access: The Multidisciplinary Open Access Journal
- IET Image Processing
- Journal of Ambient Intelligence and Humanized Computing
- IEEE International Conference on Robotics and Automation (ICRA)

Academic Chairperson

- NCIBIT 2022- The 3rd National Conference of Ideas and Innovation in Business and Information Technology, Sirjan University of Technology, Sirjan, Iran.
- NCIBIT 2021- The 2nd National Conference of Ideas and Innovation in Business and Information Technology, Sirjan University of Technology, Sirjan, Iran.
- NCIBIT 2020- The 1st National Conference of Ideas and Innovation in Business and Information Technology, Sirjan University of Technology, Sirjan, Iran.

Skills

Programming languages	Python, C++, MATLAB.
Machine learning frameworks	PyTorch , TensorFlow, Keras, scikit-learn.
Computer vision algorithms	Object detection, Image segmentation, Facial recognition, 3D reconstruction.
Deep learning techniques	Convolutional neural networks (CNNs), Recurrent neural networks (RNNs), Deep reinforcement learning.
Data science	Data analysis, Data mining, Machine learning, Statistics.
Software engineering	Software development, Version control, Testing, Deployment.
Research	Experimental design, Data collection, Data analysis, Writing, Presenting research.
Communication	Written and oral communication, Teamwork, Presentation skills.