

# JOVAN CHAVOSHINEJAD

## Machine Learning Researcher

 jovan-chavoshinejad  github.com/ChavoshiNejad

 +98 918 383 9404  j.chavoshinejad@uok.ac.ir

 No. 222, Computer Engineering Department, Engineering Faculty, University of Kurdistan, Sanandaj, Iran

### BRIEFLY

Currently, I am a volunteer researcher in the Algebraic Machine Learning Team (AML team) at the University of Kurdistan, where my main focus is on representation learning. Our team is dedicated to developing fundamental advancements in unsupervised machine learning, particularly in representation theory. My research interests focus on matrix factorization and low-rank approximation, with a specific emphasis on semi-supervised learning, self-supervised learning, recommender systems, data fusion, adversarial training and deep learning models. In 2022, I completed my Master's degree in Artificial Intelligence from the Computer Department at the University of Kurdistan, under the guidance of Dr. Fardin Akhlaghian and Amjad Seyedi. Prior to this, I earned a Bachelor's degree in Software Engineering.

### RESEARCH INTERESTS

- Machine learning, Representation learning, Optimization, Linear algebra
- Deep Learning, Self-supervised/Semi-supervised learning, Data clustering
- Matrix factorization, Data fusion, Multi-view
- Recommender systems, Trustworthy, Low-rank approximation

### EDUCATION

Master	<b>Artificial Intelligence, UNIVERSITY OF KURDISTAN, SANANDAJ, IRAN, (Sep 2019 – Feb 2022)</b> <ul style="list-style-type: none"><li>➢ Thesis title: Self-Supervised Semi-Supervised Nonnegative Matrix Factorization for Data Clustering.</li><li>➢ Advisors : Dr. Fardin Akhlaghian and Amjad Seyedi.</li><li>➢ Courses : machine learning, statistical pattern recognition, neural networks, advanced artificial intelligence, computer vision, digital image processing, Complex Networks, and Special Topics in AI.</li></ul>
Bachelor	<b>Software Engineering, UNIVERSITY OF KURDISTAN, SANANDAJ, IRAN, (Sep 2012 – Feb 2017)</b>

### PUBLICATIONS

In-prep	<b>Self-Supervised Multi-view Clustering via Nonnegative Matrix Factorization</b> S. A. Seyedi, J. Chavoshinejad, Navid Salahian, and F. Akhlaghian.
2023	<b>Self-Supervised Semi-Supervised Nonnegative Matrix Factorization for Data Clustering</b> J. Chavoshinejad, S. A. Seyedi, and F. Akhlaghian. <i>Pattern Recognition</i> , volume 137, 2023, 109282.
	<b>Adversarial Elastic Deep Nonnegative Matrix Factorization for Matrix Completion</b> S. A. Seyedi, F. Akhlaghian, A. Lotfi, N. Salahian, and J. Chavoshinejad <i>Information Sciences</i> , volume 621, 2023, pp. 562-579.
	<b>Deep Autoencoder-Like NMF with Contrastive Regularization and Feature Relationship Preservation</b> N. Salahian, F. Akhlaghian, and S. A. Seyedi, and J. Chavoshinejad <i>Expert Systems with Applications</i> , volume 214, 2023, 119051.

### PROFESSIONAL ACTIVITIES

Paper Review	Reviewing and evaluating research manuscripts (Special Issue : Graph Learning) entitled : <b>"Self-Supervised Attribute Graph Clustering Based on Topological Reconstruction"</b> <i>IEEE Transactions on Neural Networks and Learning Systems</i>
	Reviewing and evaluating research manuscripts entitled : <b>"Anomalous Citations Detection in Academic Networks"</b> <i>Artificial Intelligence Review</i>

## COMPUTER SKILLS

---

Operating Systems	Microsoft Windows
Word processing & Presentation	Office suites and $\text{\LaTeX}$
Vector and raster software	Adobe Illustrator and Adobe Photoshop
Development Tools	Pycharm, Jupyter Notebook, Colab, Visual Studio, and Eclipse
Web design	HTML and CSS

## PROGRAMMING LANGUAGES

---

2019 – present	<b>Python</b> , PyTorch, NumPy, scikit-learn, and TensorFlow
2015 – present	<b>MATLAB</b> , linear algebra and visualization
2012 – 2015	<b>JAVA</b> , object-oriented software engineering and web development
2009 – 2015	<b>C++</b>   <b>C#</b> , Software Engineering and Web development

## REFERENCES

---

**Fardin Akhlaghian**, *Associate Professor*  
Department of Computer Engineering  
UNIVERSITY OF KURDISTAN, SANANDAJ, IRAN  
@ f.akhlaghian@uok.ac.ir  
☎ +98 918 873 8383

**Amjad Seyedi**, *Graduate Research Assistant*  
Department of Computer Engineering  
UNIVERSITY OF KURDISTAN, SANANDAJ, IRAN  
@ amjadseyedi@uok.ac.ir  
☎ + 98 936 672 1167

**Alireza Abdollahpouri**, *Associate Professor*  
Department of Computer Engineering  
UNIVERSITY OF KURDISTAN, SANANDAJ, IRAN  
@ abdollahpouri@uok.ac.ir  
☎ +98 918 877 0993

**Parham Moradi**, *Associate Professor*  
Department of Computer Engineering  
UNIVERSITY OF KURDISTAN, SANANDAJ, IRAN  
@ p.moradi@uok.ac.ir  
☎ +98 912 513 5478