

In the name of God



Name: Iman Behravan

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Nationality: Iran, Islamic republic of

Date of birth: 1990/04/30

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Research interests:

- 1- Data Mining and Machine learning
- 2- Swarm Intelligence
- 3- Multi-objective optimization
- 4- Heuristic and Metaheuristics
- 5- Big Data Mining
- 6- Trajectory mining
- 7- Federated learning
- 8- Blockchain area
- 9- Zero-knowledge proof
- 10- Natural Language Processing
- 11- Large Language Models

Education and training:

August 2025 to now:

Assistant professor of electronics at University of Birjand and AI team lead at platform prime

November 2021 to August 2025:

Blockchain developer and machine learning expert at Kara group.

November 2019 to November 2021:

Postdoctoral researcher at university of Birjand.

Supervisor: Dr Seyed Mohammad Razavi.

2015 to 2019 :

Doctor of philosophy.

Department of Electrical and Computer Engineering, University of Birjand

Thesis: Proposing a data mining method based on heuristic algorithms for Big data

Supervisor : Professor seyed Hamid Zahiri.

GPA = 18.9 out 20 (94.5%)

December 2017 to June 2018 :

Research visitor student at Consiglio Nazionale delle Ricerche (KDD lab ISTI-CNR) in pisa, Italy.

Supervisor: Dr Roberto Trasarti

2013 to 2015 :

Master of Science.

Department of Electrical and Computer Engineering, University of Birjand.

Thesis: Optimization of SVM Classifier Using Inclined Planes System Optimization Algorithm.

Supervisor : Professor seyed Hamid Zahiri. The top ranked average in the MSc program among all master students in Electronics group

GPA = 19.19 out 20 (95.95%)

2009 to 2013 :

Bachelor of Applied Science

Department of Electrical Engineering, Shahid Bahonar University of Kerman.

Field and GPA = 15.86 out 20 (79%)

Personal skills and competences: Good Programmer - Help other students with their projects

Mother tongue: Persian

Other languages: English (MSRT Grade = 82)

Technical skills and competences:

Skilled in MATLAB, Python, solidity, DAX, ZoKrates, Circom, Cairo, R, Databricks, Microsoft Kusto, Power BI, Keras, scikit-learn, pyTorch, Faiss, Qdrant, Docker, git, Ganache,

| language | Highly skilled | skilled | moderate | low |
|------------|-------------------------------------|---------|-------------------------------------|-------------------------------------|
| Matlab | <input checked="" type="checkbox"/> | | | |
| Python | <input checked="" type="checkbox"/> | | | |
| Javascript | | | | <input checked="" type="checkbox"/> |
| Rust | | | <input checked="" type="checkbox"/> | |
| Solidity | <input checked="" type="checkbox"/> | | | |
| Circom | | | <input checked="" type="checkbox"/> | |
| ZoKrates | | | <input checked="" type="checkbox"/> | |
| R | | | <input checked="" type="checkbox"/> | |

Valuable experiences during work:

- Working with large language models
 - fine -tuning Titan in AWS for chatbot based projects.
 - Fine-tuning Gemini through google vertex AI studio.
 - Prompt engineering Titan, Haiku and Sonnet through AWS bedrock console.
 - fine -tuning large language models in hugging-face with our specific data.
- Working with Rasa for training an NLU to develop a chatbot.
- Working with botpress for implementing the chatbot.
- Working with methylation profiling data stored in IDAT files for tumor classification.
- Working with fastAPI, flask for developing endpoints
- Developing AI Chatbot based on RAG architecture
- Developing a fully automated pipeline to forecast TimeSpent values of Microsoft customers across different markets on a daily basis in databricks

- Developing a multi AI agent based using Claude Code to interpret the forecasts of automated pipeline

Teaching at University of Birjand:

- Electronic 3: Fall and Winter of 2016. Prepared and conducted weekly tutorials for classes of 30 students as well as marking duties. (Teacher assistant)
- Electronic 2 : Fall and Winter of 2016. Prepared and conducted weekly tutorials for classes of more than 40 students as well as marking duties. (Teacher assistant)
- Electronic 1 : Fall and Winter of 2016. Prepared and conducted weekly tutorials for classes of 17 students as well as marking duties. (Teacher assistant)
- Electronic Circuits : Spring of 2015. Prepared and conducted weekly tutorials for classes of 20 students as well as marking duties. (Teacher assistant)
- Pulse technique lab : Spring, Autumn and winter of 2019 .Prepared and conducted weekly tutorials and laboratory tests for classes of 20 students as well as marking duties.
- Matlab Programming Lab: Autumn of 2019 and winter of 2020. Prepared and conducted weekly tutorials and laboratory tests for classes of 15 students as well as marking duties.
- Digital circuits : Autumn and Winter of 2021, Prepared and conducted weekly tutorials for classes of 96 students.
- Digital circuits : Autumn and Winter of 2022, Prepared and conducted weekly tutorials for classes of 44 students.

Teaching at ACECR (Academic center for education culture and research)

Programming MATLAB

Teaching at Ibne Hesam technical university of Birjand.

Digital circuits: Winter 2018 and spring 2019. Prepared and conducted weekly tutorials for classes of 40 students as well as marking duties.

Circuit analysis : Winter 2018 and spring 2019. Prepared and conducted weekly tutorials for classes of 40 students as well as marking duties.

Linear integrated circuits: Winter 2018 and spring and autumn of 2019. Prepared and conducted weekly tutorials for classes of 12 students as well as marking duties.

Linear integrated circuits lab: Winter 2018 and spring and autumn 2019. Prepared and conducted weekly laboratory tests for classes of 12 students as well as marking duties.

CONFERENCE PAPERS:

- Iman Behravan, Seyed Hamid Zahiri, “**Optimizing of Support Vector regression classifier using Inclined Planes Optimization algorithm**”, 2nd international conference on Image processing and Pattern recognition, March 2015. (Written in farsi)

- Iman Behravan, Seyed Hamid Zahiri, “**Parameter Optimization and feature selection for Support Vector regression classifier using Multi-objective PSO**”, 20st annual Computer conference, March 2015 (CSICC 2015). (Written in farsi)
- Iman Behravan, Seyed Hamid Zahiri, “**An optimal SVM with feature selection using multi-objective PSO**”, 1st Conference on Swarm Intelligence and Evolutionary Computation (CSIEC2016).
- Iman Behravan, Oveis Dehghantanha, Seyed Hamid Zahiri, “ **Parameter optimization and feature selection for support vector machine by a multi objective IPO algorithm (MOIPO)** ”, International Conference in New Research of Electrical Engineering and Computer Science 2015
- I.Behravan, S.H.Zahiri, S.M.Razavi, R.Trasarti, “**Extracting roles of different players in soccer using an automatic clustering algorithm,**” international congress and exhibition of sciences and innovative technologies, Babol university of technology, Babol, Iran, sep 2018.
- I.Behravan, S.H.Zahiri, S.M.Razavi, R.Trasarti, “**Automatic clustering of big datasets using a swarm intelligence method**”, international congress and exhibition of sciences and innovative technologies, Babol university of technology, Babol, Iran, sep 2018.
- Nourmohammadi, Reza, Iman Behravan, and Kaiwen Zhang. "**Privacy-preserving genomic analysis via PSO-driven federated learning on blockchain.**" 2023 3rd Intelligent Cybersecurity Conference (ICSC). IEEE, 2023.

JOURNAL PAPERS:

- Iman Behravan, Oveis Dehghantanha, Seyed Hamid Zahiri, and Nasser Mehrshad, “**An Optimal SVM with Feature Selection Using Multiobjective PSO,**” Journal of Optimization, vol. 2016, Article ID 6305043, 8 pages, 2016. doi:10.1155/2016/6305043.

- I. Behravan, S. H. Zahiri, S. M. Razavi, and R. Trasarti, "**Finding Roles of Players in Football Using Automatic Particle Swarm Optimization-Clustering Algorithm**," *Big data*, vol. 7, pp. 35-56, 2019.
- I. Behravan, S. H. Zahiri, S. M. Razavi, and R. Trasarti, "**Using Grey Wolf Optimization Algorithm in Big Data Clustering**," *TABRIZ JOURNAL OF ELECTRICAL ENGINEERING*, 2020 (*Written in Farsi*)
- Behravan, S. H. Zahiri, S. M. Razavi, and R. Trasarti, "**Clustering a Big Mobility Dataset Using an Automatic Swarm Intelligence-Based Clustering Method**," *Journal of Electrical and Computer Engineering Innovations*, vol. 6, pp. 243-262, 2018.
- Behravan and S. M. Razavi, "**Stock Price Prediction using Machine Learning and Swarm Intelligence**," *Journal of Electrical and Computer Engineering Innovations (JECEI)*, vol. 8, pp. 31-40, 2020.
- Behravan I, Razavi SM "A novel machine learning method for estimating football players' value in the transfer market" *Soft Computing*. 2020 Oct 24:1-3.
- Behravan, I., and S. M. Razavi. "Application of Harris Hawks Optimization Algorithm and APSO-CLUSTERING in Predicting the Stock Market." *Journal of Electrical and Computer Engineering Innovations (JECEI)* 10.2 (2022): 447-462.
- Naraghi, Aria, Reza Nourmohammadi, and Iman Behravan. "**Real-World Applications of Artificial Intelligence and Blockchain in Healthcare**." Available at SSRN 4650201.
- Mahdipour, B., S. H. Zahiri, and I. Behravan. "An Intelligent Two and Three Dimensional Path Planning, Based on a Metaheuristic Method." *Journal of Electrical and Computer Engineering Innovations (JECEI)* 13.1 (2025): 93-116.

- Mahmoudikhah, S., S. H. Zahiri, and I. Behravan. "Fusion of Classifiers Using Learning Automata Algorithm." *Journal of Electrical and Computer Engineering Innovations (JECEI)* 13.1 (2025): 65-80.

Msc thesis (as advisor)

- 1- "Intelligent Designing the Size of Transistors of an SRAM Memory With the Aim of Improving Power Consumption and Delay" by Zahra Kafshi (university of Birjand)
- 2- "Presenting a Limited Optimization Tool for the Optimal Design of Schmitt Trigger Circuits" by Mohammad Javad Kamkar (university of Birjand)
- 3- "Power optimization and latency of a new full adder structure using innovative method" by Mina Mohammadnejad (university of Birjand)
- 4- "Early detection of gastric cancer using genomic data and machine learning" by Sina Hasani (university of Birjand)
- 5- "The role of data fusion at the decision level in the recognition of types of marine surface targets" by Mostafa Ghasemi (university of Birjand)
- 6- "Designing a marine bio monitoring system using multi-sensor systems based on data fusion" by mahdi rezaeian (defended) (university of Birjand)
- 7- "AUV Automatic Recognition Using Data Fusion Approach" by Ahmad Karimifar (defended) (university of Birjand)
- 8- "Submarine targets recognition and effect of data fusion in data level" by Hojjat Farajian (defended) (university of Birjand)
- 9- "Feature selection using Gray Wolf Optimization algorithm for Persian handwritten digit and comparing it with Genetic Algorithm" by Mohsen Ajam (defended) (university of Birjand)

PhD thesis (as advisor)

- 1- "Presenting a method for data fusion using reinforcement learning methods for multi sensors networks" by Sajjad Mahmoudikhah (proposal is confirmed) (university of Birjand)
- 2- Path planning for AUV using meta-heuristic algorithms in 3d- spaces (proposal is confirmed) (university of Birjand)

Journal reviewer or Editorial team:

· Editorial reviewer in “**progress in human computer interaction**” journal