

## CONTACT

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> Linkedin Zahra Asghari

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Google Scholar Zahra Asghari Varzaneh

> Github Zahra-Asghari

#### **TECHNICAL SKILL**

- MATLAB
- Python
- C/C++

#### LANGUAGES

- Persian: Native
- English: Advance

# Zahra Asghari Varzaneh

## SUMMARY

Zahra Asghari Varzaneh received her Ph.D. in Computer Science/Artificial intelligence at Shahid Bahonar University of Kerman, Iran. Her research interests include Machine Learning, Data Science/Data Analytics, Deep Learning, Natural Language Processing, and soft computing methods, and related topics like Metaheuristic Algorithms, Computer vision, XAI, and applications. She is Responsible, Team-Player, Self-learner, and Highly motivated and strives to excel in the academic research field and actively seeks new opportunities to conduct pioneering research.

## EDUCATION

#### 2020 - 2023

PhD in Computer Science (Artificial Intelligence) Shahid Bahonar University of Kerman (UK), Kerman, Iran Thesis: "Effective feature selection for network intrusion detection using improved metaheuristic algorithms", Degree: Excellent

#### 2011-2013

MSc in Computer Science (Artificial Intelligence) Shahid Bahonar University of Kerman (UK), Kerman, Iran Thesis: "Proposing a new Data mining method for network Intrusion Detection", Degree: Excellent

2005-2009 BSc in Computer Science Vali-Asr Rafsanjan, Rafsanjan, Iran

#### **EXPERIENCE**

2013 – 2019 (Part-time) Lecturer in Computer Engineering Payame Noor University of Esfahan, Esfahan, Iran

2016 – Current (Full –time) High school Lecturer /Management Hatami High school for girls, Ministry of Education, Iran

2020 – 2022 Researcher Ministry of Health and Medical Education, Iran **Honors and Activities** 

- First ranked student in MSc
- First ranked student in Ph.D
- Best faculty researcher prize at Shahid Bahonar University of Kerman (2013)
- Received Full Scholarship from University
- Referee in some journals such as Supercomputing



- **7 Asghari Varzaneh** M Shanbebzadeh
- 1. **Z. Asghari Varzaneh**, M. Shanbehzadeh, and H. Kazemi-Arpanahi, "Prediction of successful aging using ensemble machine learning algorithms," *BMC Medical Informatics and Decision Making*, vol. 22, no. 1, pp. 1-16, 2022.
- 2. **Z. A. Varzaneh**, S. Hosseini, S. E. Mood, and M. M. Javidi, "A new hybrid feature selection based on improved equilibrium optimization," *Chemometrics and Intelligent Laboratory Systems*, vol. 228, p. 104618, 2022.
- 3. **Z. A. Varzaneh**, A. Orooji, L. Erfannia, and M. Shanbehzadeh, "A new COVID-19 intubation prediction strategy using an intelligent feature selection and K-NN method," *Informatics in Medicine Unlocked*, vol. 28, p. 100825, 2022.
- 4. S. Hosseini and **Z. A. Varzaneh**, "Deep text clustering using stacked AutoEncoder," *Multimedia Tools and Applications*, vol. 81, no. 8, pp. 10861-10881, 2022.
- 5. **Z. A. Varzaneh** and M. Kuchaki Rafsanjani, "Intrusion detection system using a new fuzzy rule-based classification system based on genetic algorithm," *Intelligent Decision Technologies*, vol. 15, no. 2, pp. 231-237, 2021.
- M. Rafsanjani and Z. Varzaneh, "Edge detection in digital images using Ant Colony Optimization," *Computer Science Journal of Moldova*, vol. 69, no. 3, pp. 343-359, 2015.
- M. K. Rafsanjani and Z. A. Varzaneh, "Intrusion detection by data mining algorithms: a review," *Journal of New Results in Science*, vol. 2, no. 2, pp. 76-91, 2013.
- 8. M. K. Rafsanjani, **Z. A. Varzaneh**, and N. E. Chukanlo, "A survey of hierarchical clustering algorithms," *The Journal of Mathematics and Computer Science*, vol. 5, no. 3, pp. 229-240, 2012.
- 9. **Z. A. Varzaneh**, M. Sharifzadeh, M. Moatari, Fundamentals of the new artificial intelligence: neural, evolutionary, fuzzy and more, 2nd ed, Islamic Azad University. Marvdasht Branch, 978-964-10-4197-9, 2015. (**Translation**).
- M. H. Nadimi-Shahraki, Z. Asghari Varzaneh, H. Zamani, and S. Mirjalili, "Binary Starling Murmuration Optimizer Algorithm to Select Effective Features from Medical Data," Applied Sciences, vol. 13, no. 1, p. 564, 2023.
- 11. S. Hosseini and **Z. Asghari Varzaneh**, "The impact of preprocessing techniques for Covid-19 mortality prediction," Computer and Knowledge Engineering, vol. 5, no. 2, pp. 57-66, 2022.

- 12. **Z. A. Varzaneh**, S. Hosseini, and M. M. Javidi, "A novel Binary Horse herd Optimization Algorithm for Feature Selection Problem, "*Multimedia Tools and Applications*, 2023.
- 13. **Z. Asghari Varzaneh**, and S. Hosseini. "An Intelligent Fuzzy System for Diabetes Disease Detection using Harris Hawks Optimization." *Journal of AI and Data Mining*, 2023.
- 14. M. H. Nadimi-Shahraki, H. Zamani, **Z. Asghari Varzaneh**, and S. Mirjalili, "A Systematic Review of the Whale Optimization Algorithm: Theoretical Foundation, Improvements, and Hybridizations." *Archives of Computational Methods in Engineering*, pp.1-47, 2023.
- 15. M. H. Nadimi-Shahraki, H. Zamani, **Z. Asghari Varzaneh**, and A. Safaa Sadiq, and S. Mirjalili, " A Systematic Review of Applying Grey Wolf Optimizer, its Variants, and its Developments in Different Internet of Things Applications." Archives of Computational Methods in Engineering (Under review).
- *16.* **Z. A. Varzaneh**, and S. Hosseini, "BLOEO Algorithm: A Novel Approach to Feature Selection in Intrusion Detection Systems." *(Under review).*

### Certificates

- Data Analysis with Python
- Machine Learning with Python
- Deep Learning
  - Neural Networks and Deep Learning
  - Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
  - <u>Convolutional Neural Networks</u>
  - <u>Structuring Machine Learning Projects</u>
  - <u>Sequence Models</u>



## People

- Soodeh Hosseini Associate Professor, Department of Computer Science, Faculty of Mathematics and Computer, Shahid Bahonar University of Kerman, Iran. Email address: <u>so\_hosseini@uk.ac.ir</u> • Seyyedali Mirjalili Professor, Centre for Artificial Intelligence Research and Optimisation, Torrens University Australia, Brisbane, Australia. Mohammad H. Nadimi-Shahraki • Associate Professor, Faculty of Computer Engineering, Najafabad Branch, Islamic Azad University, Najafabad, Iran. Email address: <a href="mailto:nadimi@iaun.ac.ir">nadimi@iaun.ac.ir</a>; <a href="mailto:nadimi">nadimi@iaun.ac.ir</a>; <a href="mailto:nadimi@iaun.ac.ir">nadimi@iaun.ac.ir</a>; <a href="mailto:nadimi">nadimi@iaun.ac.ir</a>; <a href="mailto:n Marjan Kuchaki Rafsanjani • Professor, Department of Computer Science, Faculty of Mathematics and
  - Computer, Shahid Bahonar University of Kerman, Iran. Email address: kuchaki@uk.ac.ir