CV

Personal Data:

Name: **Nima**
Surname: **Khodadadi**
Gender: **Male / Single**
Date of Birth: **September 1991**
Country: **Iran**

Cell: +1 786 822 9664
E-mail: nima.khodadadi@miami.edu
Website: nimakhodadadi.com
GoogleScholar: Click Here
ResearchGate: Click Here
Address: 10899 SW 4th St, Miami, FL 33174

Position

University of Miami, Coral Gable, FL, USA — Jan 2023–Current
In the Field of Structure with Prof. Antonio Nanni
Research Assistant, Structural Engineering, Dept. of Civil and Arch Engineering

Florida International University, Miami, FL, USA — May 2022–Dec 2022
Research Assistant, Wind Engineering, Dept. of Civil Engineering

Iran University of Science and Technology, Tehran, Iran — Sep 2016–Jan 2021
Research Assistant, Dept. of Civil Engineering
In the Field of Structure Optimization with Prof. Ali Kaveh

Nakhjevani Academy, Tabriz, Iran — Nov 2016–Nov 2021
Scholastic Assessment Test (SAT) Tutor-Math

Nakhjevani Academy, Tabriz, Iran — Nov 2016–Nov 2021
Graduate Record Examination (GRE) Tutor-Math

Education

University of Miami, Coral Gable, FL, USA — Jan 2023–Current
Ph.D. Structural Engineering with Prof. Antonio Nanni

Iran University of Science and Technology, Tehran, Iran — Sep 2016–Jan 2021
Ph.D Structural Engineering - Optimization of 3D Frames with New Approach Using Different Shaped Sections; A Comparative Study with Prof. Ali Kaveh
GPA: 3.90/4.00 (19.30/20)

University of Tabriz, Tabriz, Iran — Sep 2014–Jul 2016
M.Sc. Structural Engineering - Optimal Design of Steel Box Column Using Charged System Search (CSS) Algorithm with Prof. Siamak Talatahri
GPA: 3.93/4.00 (19.69/20)

University of Tabriz, Tabriz, Iran — Sep 2010– Jul 2014
B.Sc. Civil Engineering
GPA: 3.23/4.00 (16.33/20)

Awards

- 1st rank among students at Iran University of Science and Technology, Department of Civil Engineering — 2020
- 1st rank among students at Iran University of Science and Technology, Department of Civil Engineering — 2021
- Obtaining an award for Iran's National Elites Foundation — 2019
- 1st rank among researchers at Iran University of Science and Technology, Department of Civil Engineering — 2019
- Obtaining awards for Iran's National Elites Foundation — 2018

- Province Educational Gold Medal: Awarded by the University of Tabriz, Master of Science (M.Sc.) — 2017
- M.Sc. thesis marked, 20 out of 20 — 2016
- 1st rank among students at University of Tabriz Master of Science (M.Sc.) — 2016
- Among 1% of approximately 30,000 Participants Who Passed Iranian Nationwide Universities' Master Entrance Exam in the Field of Civil Engineering — 2010
- 1230th rank among more than 310,000 participants in Iranian National University Entrance Exam in the whole country — 2010
- 1st rank student for four consecutive years of high-school and pre-university curriculum — 2010–2016

Interests

- Structural Engineering
- Materials Engineering
- Optimal Analysis of Structures
- Machine Learning
- Evolutionary Algorithms
- Introduction, Improvement, Hybridization and Applications of DS Methods
- Steel Structures
- Data Science (DS)

Publications – Papers

29. **Khodadadi, N.**, Talatahari, S. and Gandomi, A.H, (2023), ANNA: Advanced neural network algorithm for optimization of structures,*Proceedings of the Institution of Civil Engineers-Structures and Buildings*(IF: 1.53 –link)
28. El-Kenawy, E.S.M., Mirjalili, S., **Khodadadi, N.**, Abdelhamid, A.A., Eid, M.M., El-Said, M. and Ibrahim, A., (2023), Feature selection in wind speed forecasting systems based on meta-heuristic optimization,*Plose One*(IF: 3.752 –link)
27. Atteia, G., El-kenawy, E.S.M., Samee, N.A., Jamjoom, M.M., Ibrahim, A., Abdelhamid, A.A., Azar, A.T., **Khodadadi, N.**, Ghanem, R.A. and Shams, M.Y., (2023), Adaptive Dynamic Dipper Throated Optimization for Feature Selection in Medical Data, *Computer Systems Science and Engineering.*(IF: 4.39 –link)
26. El Sayed, M., Abdelhamid, A.A., Ibrahim, A., Mirjalili, S., **Khodadadi, N.**, Alhussan, A.A. and Khafaga, D.S., (2023), Al-Biruni Earth Radius (BER) Metaheuristic Search Optimization Algorithm, *Computer Systems Science and Engineering.*(IF: 4.39 –link)
25. Khafaga, D. S., Karim, F. K., Abdelhamid, A. A., El-Kenawy, E. M., Alkahtani, H. K., **Khodadadi, N.**, Hadwan, M., Ibrahim, A.,(2023), Voting Classifier and Metaheuristic Optimization for Network Intrusion Detection, *Computers, Materials and Continua.*(IF: 4.15 –link)
24. Sharma, S.,**Khodadadi, N.**, Saha, A.K., Gharehchopogh, F.S. and Mirjalili, S., (2022), Non-dominated Sorting Advanced Butterfly Optimization Algorithm for Multi-objective Problems, *Journal of Bionic Engineering.*(IF:3.27 –link)
23. Khafaga, D.S., Ibrahim, A., El-Kenawy, E.S.M., Abdelhamid, A.A., Karim, F.K., Mirjalili, S., **Khodadadi, N.**, Lim, W.H., Eid, M.M. and Ghoneim, M.E., (2022), An Al-Biruni Earth Radius Optimization-Based Deep Convolutional Neural Network for Classifying Monkeypox Disease, *Diagnostics.*(IF: 3.992 –link)
22. Abdollahzadeh, B., Soleimanian, G. F., **Khodadadi, N.** and Mirjalili, S., (2022), Mountain Gazelle Optimizer: A New Nature-inspired Metaheuristic Algorithm for Global Optimization Problems, *Advances in Engineering Software.*(IF: 4.141 –link)
21. **Khodadadi, N.**, Abualigah, L., El-Kenawy, E. M., Snasel, V., and Mirjalili, S., (2022), An Archive-based Multi-Objective Arithmetic Optimization Algorithm for Solving Industrial Engineering Problems, *IEEE Access.*(IF: 3.367 –link)

20. Nouhi, B., **Khodadadi, N.**, Azizi, M., Talatahari, S., and Gandomi, A. H., (2022), Multi-Objective Material Generation Algorithm (MOMGA) for Optimization Purposes, *IEEE Access.*(IF: 3.367 –link)
19. El-Kenawy, M. E., **Khodadadi, N.**, Khoshnaw, A., Mirjalili, S., Alhussan, A. A., Khafaga, D. S., Ibrahim, A., Abdelhamid, A. A., (2022), Advanced Dipper-Throated Meta-Heuristic Optimization Algorithm for Digital Image Watermarking, *Applied Sciences.*(IF: 2.67 –link)
18. Abdelhamid, A. A., El-Kenawy, M. E., **Khodadadi, N.**, Mirjalili, S., Khafaga, D. S., Alharbi,A. H., Ibrahim, A., M Eid, M., Saber, M., (2022), Classification of Monkeypox Images Based on Transfer Learning and the Al-Biruni Earth Radius Optimization Algorithm, *Mathematics.*(IF: 2.84 –link)
17. M Eid, M., El-Kenawy, M. E., **Khodadadi, N.**, Mirjalili, S., Khodadadi, E., Abotaleb, M., Alharbi, A. H., Abdelhamid, A. A., Ibrahim, A., Amer, M. G., Kadi, A., Khafaga, D. S., (2022), Meta-Heuristic Optimization of LSTM-Based Deep Network for Boosting the Prediction of Monkeypox Cases, *Mathematics.*(IF: 2.84 –link)
16. A Alsayadi, H.,**Khodadadi, N.**, and Kumar, S., (2022), Improving the Regression of Communities and Crime Using Ensemble of Machine Learning Models, *Journal of Artificial Intelligence and Metaheuristics.*(–link)
15. **Khodadadi, N.**, Soleimanian, G. F., and Mirjalili, S. (2022), MOAVOA: a new multi-objective artificial vultures optimization algorithm, *Neural Computing and Applications.*(IF: 5.606 –link)
14. El-Kenawy, E. M., Mirjalili, S., Abdelhamid A. A., Ibrahim, A., **Khodadadi, N.**, Eid, M. M (2022), Meta-Heuristic Optimization and Keystroke Dynamics for Authentication of Smartphone Users, *Mathematics*(IF: 2.59 –link)
13. Zhao, W., Zhang, Z., Mirjalili, S., Wang, L., **Khodadadi, N.**, Mirjalili, S. M, (2022), An effective multi-objective artificial hummingbird algorithm with dynamic elimination-based crowding distance for solving engineering design problems, *Computer Methods in Applied Mechanics and Engineering.*(IF: 6.756 –link)
12. Azizi, M. ,Talatahari, S., **Khodadadi, N.**, and Sareh, P, (2022), Multi-Objective Atomic Orbital Search (MOAOS) for Global and Engineering Design Optimization, *IEEE Access.*(IF: 3.367 –link)
11. **Khodadadi, N.**,Abualigah, L., and Mirjalili, S, (2022), Multi-objective Stochastic Paint Optimizer (MOSPO), *Neural Computing and Applications.*(IF: 5.606 –link)
10. **Khodadadi, N.**, Talatahari, S. , and Dadras Eslamlou, A., (2022), MOTEO: a novel multi-objective thermal exchange optimization algorithm for engineering problems, *Soft Computing.*(IF: 6.725 –link)
9. **Khodadadi, N.**, ,Snasel, V., and Mirjalili, S, (2022) Dynamic Arithmetic Optimization Algorithm for Truss Optimization Under Natural Frequency Constraints, *IEEE Access.*(IF: 3.367 –link)
8. **Khodadadi, N.**, Mirjalili, S, (2022), Truss Optimization with Natural Frequency Constraints Using Generalized Normal Distribution Optimization, *Applied Intelligence.*(IF: 1.58 –link)
7. **Khodadadi, N.**, Azizi, M. ,Talatahari, S., and Sareh, P, (2021), Multi-Objective Crystal Structure Algorithm (MOCryStAl): Introduction and Performance Evaluation, *IEEE Access*(IF: 3.367 –link)
6. Kaveh, A., **Khodadadi, N.**, and Talatahari, S., (2021), A Comparative Study for the Optimal Design of Steel Structures Using CSS and ACSS Algorithms, *International Journal of Optimization in Civil Engineering.*(IF: 0.9 –link)
5. Kaveh, A., Talatahari, S. and **Khodadadi, N.**, (2020), Stochastic Paint Optimizer: Theory and Application in Civil Engineering, *Engineering with Computers.* (IF: 5.030–link)

4. Kaveh, A., **Khodadadi, N.**, Farahamand Azar, B. and Talatahari, S., (2020), Optimal design of large-scale frames with an advanced charged system search algorithm using box-shaped sections, *Engineering with Computers.* (IF: 5.030 –link)
3. Kaveh, A., Dadras Eslamlou, A. and **Khodadadi, N.**, (2020), Dynamic Water Strider Algorithm for Optimal Design of Skeletal Structures, *Periodica Polytechnica Civil Engineering.*(IF: 1.140–link)
2. Kaveh, A., Talatahari, S. and **Khodadadi, N.**, (2019), The Hybrid Invasive Weed Optimization-Shuffled Frog-leaping Algorithm Applied to Optimal Design of Frame Structures, *Periodica Polytechnica Civil Engineering.* (IF: 1.140–link)
1. Kaveh, A., Talatahari, S. and **Khodadadi, N.**., (2019), Hybrid Invasive Weed Optimization-Shuffled Frog-Leaping Algorithm for Optimal Design of Truss Structures, *Iranian Journal of Science and Technology, Transactions of Civil Engineering.*(IF: 0.975–link)

Publications– Book Chapters

12. Khazalah, A., Prasanthi, B., Thomas, D., Vello, N., Jayaprakasam, S., Sumari, P., Abualigah, L, E Ezugwu, A., Hanandeh, E. S.,**Khodadadi, N.**, (2022) "MImage Processing Identification for Sapodilla Using Convolution Neural Network (CNN) and Transfer Learning Techniques" Springer. Book Chapter: Classification Applications with Deep Learning and Machine Learning Technologies
11. **Khodadadi, N.**,Mirjalili, S. M.,,Zhao, W., Zhang, Z., Wang, L. and Mirjalili, S., (2023) "Multi-Objective Artificial Hummingbird Algorithm" Springer. Book Chapter: Advances in Swarm Intelligence.(link)
10. Mirjalili, S.M, Mirjalili, S.Z,**Khodadadi, N.**, Snasel, V., and Mirjalili, S., (2023) "Grey Wolf Optimizer, Whale Optimization Algorithm, and Moth Flame Optimization for Optimizing Photonics Crystals " Springer. Book Chapter: Advances in Swarm Intelligence.(link)
9. Abdollahzadeh, B., Soleimanian, G. F,**Khodadadi, N.** and Mirjalili, S., (2023) "A Hybrid African Vulture Optimization Algorithm and Harmony Search: Algorithm and Application in Clustering" Springer. Book Chapter: Advances in Swarm Intelligence.(link)
8. **Khodadadi, N.**, Mirjalili, S.M, Mirjalili, S.Z, and Mirjalili, S., (2022) "Chaotic Stochastic Paint Optimizer (CSPO) " Springer. Book Chapter: Proceedings of 7th International Conference on Harmony Search, Soft Computing and Applications.(link)
7. **Khodadadi, N.**, Soleimanian, G. F, Abdollahzadeh, B., and Mirjalili, S., (2022) "AMHS: Archive-Based Multi-objective Harmony Search Algorithm " Springer. Book Chapter: Proceedings of 7th International Conference on Harmony Search, Soft Computing and Applications.(link)
6. Mirjalili, S.Z, **Khodadadi, N.**, Sajeev, S., Saha, R., Mirjalili, S.M, and Mirjalili, S., (2022) "Evolutionary Population Dynamic Mechanisms for the Harmony Search Algorithm " Springer. Book Chapter: Proceedings of 7th International Conference on Harmony Search, Soft Computing and Applications.(link)
5. **Khodadadi, N.**, Mirjalili, S.M, and Mirjalili, S., (2022) "Multi-objective Moth-Flame Optimization Algorithm for Engineering Problems " CRC Press. Book Chapter: Handbook of Moth-Flame Optimization Algorithm: Variants, Hybrids, Improvements, and Applications.(link)
4. **Khodadadi, N.**, Mirjalili, S.M, and Mirjalili, S., (2022) "Optimal Design of Truss Structures with Continuous Variable Using Moth-Flame Optimization " CRC Press. Book Chapter: Handbook of Moth-Flame Optimization Algorithm: Variants, Hybrids, Improvements, and Applications.(link)
3. Mirjalili, S.M, Davar, S., **Khodadadi, N.**, and Mirjalili, S., (2022) "Design Optimization of Photonic Crystal Filter Using Moth-Flame Optimization Algorithm " CRC

Press. Book Chapter: Handbook of Moth-Flame Optimization Algorithm: Variants, Hybrids, Improvements, and Applications.(link)

2. Al-Tashi, Q., Mirjalili, S., Wu, J., Abdulkadir, S.J, Shami, T.M, **Khodadadi, N.**, and Alqushaibi, A., (2022) "Moth-Flame Optimization Algorithm for Feature Selection: A Review and Future Trends " CRC Press. Book Chapter: Handbook of Moth-Flame Optimization Algorithm: Variants, Hybrids, Improvements, and Applications.(link)
1. Abualigah, A., Abd Elaziz, M., **Khodadadi, N.**, Forestiero, A., Jia, H., and Gandomi, A. H., (2022) "Aquila Optimizer Based PSO Swarm Intelligence for IoT Task Scheduling Application in Cloud Computing" Springer, Cham. Book Chapter: Integrating Meta-Heuristics and Machine Learning for Real-World Optimization Problems.(link)

Publications– Book

1. **Khodadadi, N.** and Broujerdian, V., (2020), *Introduction to Fracture Mechanic (In Persian)*, Iran University of Science and Technology Publications, Vol. 1, ISBN:978-964-454-502-3, Tehran, Iran.

Publications – Conferences

3. Veladi, H. and **Khodadadi, N.**, (2020), A review of evaluation in seismic performance of wood building structures with numerical and experimental methods, *2nd International Congress On Engineering, Technology and Innovation*, Darmstadt University, Germany.
2. Veladi, H. and **Khodadadi, N.**, (2020), An experimental study on assessing behavior of quay walls under the action of irregular waves using Artificial Neural Network, *2nd. International Congress on science & Engineering*, Paris, France.
1. **Khodadadi, N.**, Pourabdollah, O. and Ali Ordoukhani, A., (2018), Lightweight steel structures and its advantages over traditional manufacturing methods, *Second National Conference on Structural Engineering of Iran*, Tehran, Iran.

Journals Editor

- **Editor Board:** Journal of Artificial Intelligence and Metaheuristics
- **Guest Editor:** Intelligent Automation & Soft Computing (Issues: Optimization Algorithm for Intelligent Computing Application)
- **Guest Editor:** Computers, Materials & Continua (Issues: Optimization for Artificial Intelligence Application)

Journals Reviewer

- Scientific Reports
- PLOS ONE
- IEEE Access
- Neurocomputing
- Applied Intelligence (APIN)
- Soft Computing
- Computational Intelligence and Neuroscience
- CMC-Computers, Materials and Continua
- Decision Analytics Journal
- Intelligent Automation & Soft Computing
- Frontiers in Energy Research
- Computer Systems Science and Engineering
- Artificial Intelligence Review

Patent

1. Kiddy Searcher Robot Raily 2018

Teaching experience

University of Tabriz, Tabriz, Iran 2014–2015
Course: Engineering mathematics

University of Tabriz, Tabriz, Iran 2011–2014
Course: Statics

Voluntary Activities

Teaching physics and mathematics to high school poor students as a charity
Transplant Organ Procurement Unit Member
Blood Donation Group Member
Disaster Engineering Assistance Team (Varzeghan & Kermanshah Earthquakes)

Sport Awards

1st rank of Province Swimming Champion	2019
1st rank of Province Soccer Champion	2018
1st rank of Province Futsal Champion	2017

Languages

- English: Proficient & IELTS Score: 6.5 (L=7.5, R=6.5 S=6.5, W=6)
- Kurdish: Native
- Persian: as Native
- Azari: as Native
- Turkish: Proficient

skills

Programming:	MATLAB, FORTRAN, GIT, PYTHON, LATEX
Engineering Softwares:	OpenSees, Etabs, Sap, Safe, AutoCad
Operating Systems:	MacOs, IOS, Windows, Linux
Statistical tools:	R, SPSS, Minitab
Sports:	Having a Certified Lifeguard, professional Soccer player, professional swimmer
Music Instrument:	Playing Iranian Santoor