# MODHI LAFTA MUTAR

**Ph.D in Mathematics / Modelling**


Thi-Qar, Iraq

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## PROFIAL

**Name:** Modhi Lafta Mutar
**Title:** Ph. D
**Nationality:** Iraqi
**Date & Place of Birth:** 1978 /Iraq
**Marital Status:** Married
**No. Of Children:** 4
**Health Status:** Fit

**Affiliation:**
Deputy Dean for Administrative Affairs of the Engineering Technical College at Al-Ayen University, Thi-Qar, Iraq

## LINKS

Google Scholar

Scopus

ORCID

Research Gate

## ACADEMIC QUALIFICATIONS

- Ph. D in Mathematics/ Modelling — Universiti Teknikal Malaysia Melaka (UTeM)- 2021
- Master in mathematics science – Mathematical Analysis — University of Tishreen - Syria 2012
- Bachelor of Education- Science of mathematics — University of Thi-Qar, Iraq- 2001

## AREAS OF EXPERTISE

- Operations Research (OR)
- Optimization Techniques (OTs)
- Metaheuristic Algorithms (MAs)
- Combinatorial Optimization Problems (COPs)
- Reliable Communication Network Design (RCND)

## ACADEMIC TEACHING EXPERIENCE

- 2002-2023 — Teacher at the Iraqi Ministry of Education
- 2015 -2016 — Lecturer at Open Educational College Ministry of Education – Iraq
- 2021-2023 — Lecturer at Open Educational College Ministry of Education – Iraq
- Dec.2023-Present — Lecturer at AL-AYEN University-Thi-Qar- Iraq

## COURSES AND WORKSHOPS

- Academic English Programme of the session 2016-2017 in Universiti Teknikal Malaysia Melaka (UTeM).
- Participant in a workshop titled “Multi-Criteria Decision-Making Techniques”, Speakers: Assoc. Prof. Dr. Aws Alaa Zaidan, Dr. Bilal Bahaa Zaidan, Faculty of Computer Science and Information Technology, University Putra Malaysia (UPM), 25 &26 Jan. 2019, Malaysia.

## SKILLS

- Computer skills
- Working under pressure
- Communications and management skills
- SPSS software
- English

## CERTIFICATIONS AND LETTERS OF ACKNOWLEDGEMENT AND APPRECIATION

- Certificate of the pass of Academic English Programme of the session 2016-2017 in Universiti Teknikal Malaysia Melaka (UTeM).
- Certificate of a participant in a workshop titled “Multi-Criteria Decision-Making Techniques”, Speakers: Assoc. Prof. Dr. Aws Alaa Zaidan, Dr. Bilal Bahaa Zaidan, Faculty of Computer Science and Information Technology, UPM, 25 &26 Jan. 2019, Malaysia.
- Certificate of member of the scientific committee of the sixth International Scientific Conference on " The Natural Science the Recent Developments of the Era". Istanbul 28 September to 1st October 2020.

## PUBLICATIONS (WOS and Scopus indexed)

**1.** Asaad Shakir Hameed, Modhi Lafta Mutar, Haiffa Muhsan B. Alrikabi, Zakir Hussain Ahmed,Abeer A. Abdul–Razaq, Huda Karem Nasser, "A Hybrid Method Integrating a Discrete Differential Evolution Algorithm with Tabu Search Algorithm for the Quadratic Assignment Problem: A New Approach for Locating Hospital Departments", Mathematical Problems in Engineering, vol. 2021(9), Article ID 6653056,1-21.

**2.** HAMEED, ASAAD SHAKIR, et al. "A HYBRID METHOD INTEGRATING A RANK-BASED ANT SYSTEMALGORITHM WITH INSERT AND SWAP ALGORITHM FOR THE CAPACITATED VEHICLE ROUTING PROBLEMSOLUTION." Journal of Theoretical and Applied Information Technology. Vol.99. Issue 3 (2021).

**3.** Mohammed F. Alrifaie, Zakir Hussain Ahmed, Asaad Shakir Hameed, Modhi Lafta Mutar. Using Machine Learning Technologies to Classify and Predict Heart Disease. International Journal of Advanced Computer Science and Applications. Vol. 12, No. 3, 2021.

**4.** Mundher Mohammed Taresh, Ningbo Zhu, Talal Ahmed Ali Ali, Asaad Shakir Hameed, Modhi Lafta Mutar, "Transfer Learning to Detect COVID-19 Automatically from X-Ray Images Using Convolutional Neural Networks", International Journal of Biomedical Imaging, vol. 2021, Article ID 8828404, 9 pages, 2021. https://doi.org/10.1155/2021/8828404.

**5.** MODHI LAFTA MUTAR, M.A. BURHANUDDIN, ASAAD SHAKIR HAMEED, NORZIHANI YUSOF, MOHAMMED F. ALRIFAIE AND ALI A. MOHAMMED. "MULTI-OBJECTIVES ANT COLONY SYSTEM FOR SOLVING MULTI-OBJECTIVES CAPACITATED VEHICLE ROUTING PROBLEM." Journal of Theoretical and Applied Information Technology. Vol. 98. Issue 24 (2020).
**6.** Hameed, A., et al. "A new hybrid approach based on discrete differential evolution algorithm to enhancement solutions of quadratic assignment problem." International Journal of Industrial Engineering Computations 11.1 (2020): 51-72.
**7.** Mutar, M., et al. "An efficient improvement of ant colony system algorithm for handling capacity vehicle routing problem." International Journal of Industrial Engineering Computations 11.4 (2020): 549-564.
**8.** Asaad Shakir Hameed, Burhanuddin Mohd Aboobaider, Modhi Lafta Mutar, and Ngo Hea Choon: An Efficient Crossover Operator for Quadratic Assignment Problem Based on Discrete Differential Evolution Algorithm. International Journal of Advanced Science and Technology. Vol. 28, No. 8, (2019), pp. 591- 60. 2019.
**9.** Modhi Lafta Mutar, Burhanuddin Mohd Aboobaider, and Asaad Shakir Hameed: Enhancing solutions of capacity vehicle routing problem based on an improvement ant colony system algorithm Journal of Advanced Research in Dynamical and Control Systems. 11(1). pp 1362 -1374. 2019.
**10.** Hameed, Asaad Shakir, et al. "Improved Discrete Differential Evolution Algorithm in Solving Quadratic Assignment Problem for best Solutions." INTERNATIONAL JOURNAL OF ADVANCED COMPUTER SCIENCE AND APPLICATIONS 9.12 (2018): 434-439.
**11.** Asaad Shakir Hameed, Burhanuddin Mohd Aboobaider, Modhi Lafta Mutar, Ngo Hea Choon, and Wassim Habib Bilal: A comparative study between the branch and cut algorithm and ant colony algorithm to solve the electric meter reader problem in rural areas. Opcion. 34(86). pp 1525 1539. 2018.
**12.** Asaad Shakir Hameed, Burhanuddin Mohd Aboobaider, Ngo Hea Choon, Modhi Lafta Mutar, and Wassim Habib Bilal: Review on the Methods to Solve Combinatorial Optimization Problems Particularly: Quadratic Assignment Model. International Journal of Engineering & Technology.Vol.7 (3.20). pp.15 20. 2018.
**13.** Modhi Lafta Mutar, Burhanuddin Mohd Aboobaider, and Asaad Shakir Hameed: Review Paper in Vehicle Routing Problem and Future Research Trend. International Journal of Applied Engineering Research ISSN 0973-4562. Volume 12, Number 22. pp. 12279-12283. 2017.
**14.** Ahmed, Zakir Hussain, Asaad Shakir Hameed, Modhi Lafta Mutar, Mohammed F. Alrifaie, and Mundher Mohammed Taresh. "Experimental Study of Hybrid Genetic Algorithms for the Maximum Scatter Travelling Salesman Problem." International Journal of Advanced Computer Science and Applications. Vol. 12, No. 8, 2021.
**15.** Mundher Mohammed Taresh, Ningbo Zhu, Talal Ahmed Ali Ali, Mohammed Alghaili, Asaad Shakir Hameed, and Modhi Lafta Mutar. KL-MOB: automated COVID-19 recognition using a novel approach based on image enhancement and a modified MobileNet CNN. Peer J Computer Science. pp 1-23. September 20, 2021.
**16.** Ahmed, Zakir Hussain, Asaad Shakir Hameed, and Modhi Lafta Mutar. "Hybrid Genetic Algorithms for the Asymmetric Distance-Constrained Vehicle Routing Problem." Mathematical Problems in Engineering 2022 (2022).
**17.** Abdul-Razaq, A. A., Nasser, H. K., Hameed, A. S., Mutar, M. L., Alrikabi, H. M. B., AL-Rifaie, M. F., Jaber,M. M.(2022). Implementation of the enhanced ant colony system algorithm to solve reliable communication network design. Eastern-European Journal of Enterprise Technologies, 3 (9 (117)), 44–52. doi: https:// doi.org/10.15587/1729-4061.2022.259693
18. Nasser, H.K., Shehab, W.A.-A., Hameed, A.S., Abdul–Razaq, A.A., Mutar, M.L. Harmony Search Algorithm for Solving Combinatorial Optimization Problems: Bibliometric Analysis. Mathematical Modelling of Engineering Problems, 2023, 10(3), pp. 906–914.

## PUBLICATIONS (Not indexed)

| Years | Publications |
|---|---|
| **2017** | Modhi Lafta Mutar, Asaad Shakir Hameed: Stability of-saddle points And-extreme saddle points. Journal of College of Education for Pure Science. 7 (1). Pp81-96. 2017. |
| **2018** | Asaad Shakir Hameed, Burhanuddin Mohd Aboobaider, Ngo Hea Choon, Modhi Lafta Mutar, and Wassim Habib: An efficient Hybrid approach in solving the Multiple Postman Problem International Journal of Engineering & Technology. Vol. 7(4.36), pp. 154 159. 2018. |

## ACADEMIC STATISTICS

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|---|---|---|---|
| *Google Scholar h-index* | 7 | *Number of Citations* | 224 citations in *Google Scholar* |
| *Scopus h-index* | 5 | | 160 citations in *Scopus* |
| *Research Gate h-index* | 7 | | 203 citations in *Research gate* |

## REFERENCES

**Professor Dr. Waleed Fekry Faris**
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