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Curriculum Vitae (CV)



Yousria Abo-Elnaga Abd ELhameed (Yousria Abo-Elnaga)



Professor of Operation Research, Department OF Computer Science Higher Technological Institute, tenth of Ramadan City.

Personal Information:

Academic Rank: Professor

Department: Computer Science

Specialization: Optimization

Position: Professor

Google Scholar: https://scholar.google.com/citations?user=OUpNt_IAAAAJ&hl=ar

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Education:

Degree	Discipline	Institution	Year
Ph.D.	On Recent Approach for Solving Multiobjective Optimization	Faculty of Engineering, Ain Shames University, Cairo, Egypt	2006
M.Sc.	Interactive Approaches in Solving Large Scale Programming Problems	Faculty of Engineering, Ain Shames University, Cairo, Egypt	2001
B.Sc.	Electrical Engineering	Faculty of Engineering, Ain Shames University, Cairo, Egypt	1994

Academic Experience:

Institution: Higher Technological Institute, 10th Of Ramadan city, Egypt.

Rank: Professor

Dates: 2022

Institution: Higher Technological Institute, 10th Of Ramadan city, Egypt.

Rank: Associate Professor

Dates: 2017

Institution: Higher Technological Institute, 10th Of Ramadan city, Egypt.

Rank: Assistant Professor

Dates: 2008

Institution: Higher Technological Institute, 10th Of Ramadan city, Egypt.

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Dates: 2001

Institution: Higher Technological Institute, 10th Of Ramadan city, Egypt.

Rank: Teaching Assistant

Dates: 1994

Research interests:

Mathematical Programming, Multi-Criteria Decision Making, Interactive Approaches, Fuzzy Mathematical Programming, Trust Region, Numerical Optimization, Game Programming, and Artificial Intelligent Approaches-

Publications:

- 1- <u>Yousria Abo-Elnaga</u>, and M.S. Osman "An Interactive Approach for Solving the non-differentiable nonlinear programming problems "Scientific Bulletin, Ain Shames University, Faculty of Engineering, vol.40,No 3.Septemper30,2005.
- 2- <u>Yousria Abo-Elnaga</u> and M.S. Osman 'Stability of parametric nonlinear programming problems'8th International Conference on Parametric Optimization (PARAOPT VIII) Nov 27th-Dec 3rd (2005)- Special volume of the journal "Optimization".
- 3- Yousria Abo-Elnaga, M.S. Osman "An Interactive Approach for solving Fuzzy Multiobjective programming Problems with a Parametric Study "8th International Conference on Parametric Optimization (PARAOPT VIII) Nov 27th-Dec 3rd (2005)- Special volume of the journal "Optimization".
- 4- <u>Yousria Abo-Elnaga</u> "Utilization of the Stability Notions in Solving the Inverse Optimization Problems, fourth Saudi sciences conference, contribution of science faculties in the development process of KSA, Al Madinah Almunawwarah 21-24,2010.
- 5- Bothina El-Sobki, and <u>Yousria Abo-Elnaga</u> Bothina El-Sobki" An Active Set Trust-Region Algorithm for Solving Constrained Multi-Objective Optimization Problems", Applied Mathematical Sciences, ,Vol.6,2012,no.33,1599-**1612**.

- 6- Bothina El-sobki, and Yousria Abo-Elnaga "On Stability of Fuzzy Multi-objective optimization Problems Using Trust-Region Algorithm", International Journal of Mathematics, Vol.6, 2012, No.28, 1367-1382.
- 7- Bothina El-Sobki <u>,**Yousria Abo-Elnaga**</u>, , and Hanadi Zahed "Utilization of Trust Region Algorithm in Solving Reactive Power Compensation Problem", Applied Mathematical Sciences, Vol. 6, 2012, no. 54, 2649 2667.
- 8- <u>Yousria Abo-Elnaga</u>, Bothina El-Sobki, and H'anadi Zahed "Trust Region Algorithm for Multi-objective Transportation, Assignment, and Transshipment Problems", Life Science Journal 2012,9(3). vol.6, 2012, no.28, 1368-1382.
- 9- Yousria Abo-Elnaga, Bothina El-Sobki" A Numerical Parametric Study OF Multi-Objective non-linear Programming Problems Under Fuzzy Environment Using a Trust-Region Algorithm" *Electronic Journal of Mathematical Analysis and Applications* Vol. 2(1) Jan. 2014, pp. 12-25.
- 10- Yousria Abo-Elnaga, M.A. Abo-Sinna, and, <u>A.A. Mousa</u>"An interactive dynamic approach based on hybrid swarm optimization for solving multiobjective programming problem with fuzzy parameters" Applied Mathematical Modeling, Vol. 38(2013) pp. 2000-2014,
- 11-Bothina El-Sobki, and <u>Yousria Abo-Elnaga</u>, "Multi-objective economic Emission Load Dispatch Problem with Trust-region Strategy", Electric Power Systems Research, Vol. 108 (2013) 254–259.
- 12- Assma F. Elsayed and <u>Yousria Abo-Elnaga</u>(2014) "Comparison between Modified Variational Iteration Method and Computerized Fluent Ansys for Heat and Mass Transfer under an Infant Radiant Warmer" Jökull Journal Vol. 64, No.6 (2014)pp. 333-353,
- 13- <u>Yousria Abo-Elnaga</u> (2014) "A decomposition technique for Inconsistent 4Linear Systems of Equations "Jökull Journal, Vol. 64, No6. PP 453- 462.
- **14-** <u>Yousria Abo-Elnaga</u> and A.A.Moussa (**2014**)" Inverse optimization for nonlinear programming problems "Wulfenia Journal, Vol. 21.
- **15-Y. Abo Einaga ET. al.** "Procedure for Exact Solutions of Sti_ Ordinary Deferential Equations Systems" British Journal of Mathematics & Computer Science 4(23): 3252-3270,
- **16-** <u>Yousria Abo-Elnaga</u>, Bothina El-Sobki and Layla Elnaser (**2015**)" Solving Warehouse Location problems by trust region algorithm "Sylwan Journal, Vol. 159, No.1, 225-37.

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- 17- <u>Yousria Abo-Elnaga</u>, and Bothina El-Sobki (2015)" An Active Set Newton Interior Point Algorithm for Solving a Constraints Optimization Problem" Electronic journal of mathematical analysis and applications, Vol. 4, No.1, 225-37.
- 18- **B. El-Sobkya**, <u>Y. Abo-Elnaga</u>(2017)" Multi-objective optimal load flow problem with interior-point trust-region strategy", Electric Power Systems Research 148 (2017) 127–135.
- 19- <u>Y. Abo-Elnaga</u>, B. EL-Sobkyy, and E. Hrebish (2017)" A Hybrid Optimization Technique for Solving Multi-Objective Power Flow Problem" MITTEILUNGEN KLOSTERNEUBURG,
- 20- <u>Yousria Abo-Elnaga</u> A. A. Mousa, and M. Higazy (2018)," K-means cluster algorithm-based evolutionary approach for constrained multi-objective optimization", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 6) pp. 3789-3809.
- 21- <u>Y. Abo-Elnaga</u> and B. El-Sobky (2018)," A penalty method with trust-region mechanism for nonlinear bilevel optimization problem" Journal of Computational and Applied Mathematics 340 (2018) 360–374.
- 22-Y. Abo-Elnaga and B. El-Sobky(2018), "Generation of Pareto optimal solutions for multiobjective optimization problems via a reduced interior-point algorithm", Journal of Taibah University for Science, DOI: 10.1080/16583655.2018.1494422.
- 23- A. A. Mousa, M. Higazy and <u>Yousria Abo-Elnaga</u> (2018)," K-means cluster algorithm-based evolutionary approach for constrained multi-objective optimization", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 6) pp. 3789-3809
- 24-B. El-sobky, <u>Y. Abo-elnaga</u>, A. Elsaid & A. Foda (2018)," Relaxed I-SHOT trust-region algorithm for solving multi-objective economic emission load dispatch problem" Journal of Taibah University for Science, doi.org/10.1080/16583655.2018.1503796.
- 25-Yousria A. Aboelnaga and Mai F. Zidan (2020)"MIN-MAX Solution for parametric continuous static games under roughness (PARAMETERS IN THE COST FUNCTION AND FEASIBLE REGION IS A ROUGH SET), URAL MATHEMATICAL JOURNAL, Vol. 6, No. 2, 2020, pp. 3–14.
- 26-Y.A.Abonaga, M.Shokry, and M.F.Zidan" Nash Equilibrium solutions for Fuzzy Rough Continuous Static Games" (2020), International Journal of Emerging Trends in Science and Technology, Vol. 07, Issue 10, Pages 6950-6965, ISSN 2348-9480.
- 27-Yousria Abo-Elnaga, M.A. El-Shorbagy (2020)" Multi-Sine Cosine Algorithm for Solving Nonlinear Bilevel Programming Problems" International Journal of Computational Intelligence Systems, DOI: 10.2991/iicis.d.200411.001.



- 28- Yousria Abo-Elnaga, and Sarah Nasr (2020)," Modified Evolutionary Algorithm and Chaotic Search for Bilevel Programming Problems" DOI: 10.3390/sym12050767
- 29- Abd Allah A. Mousa, and <u>Yousria Abo- Elnaga</u> (2020)," **Stability of Solutions for Parametric Inverse Nonlinear Cost Transportation Problem**", Mathematics, 8, 2027;
- 30-M.A. Elsisy M.A. El Sayed, and <u>Y. Abo-Elnaga</u> (2020), "A novel algorithm for generating Pareto frontier of bi-level multi-objective rough nonlinear programming problem" Ain Shams Engineering Journal Engineering Physics and Mathematics, doi.org/10.1016/j.asej.2020.11.006.
- 31-Y. Abo-Elnaga and S. Nasr (2021) "K-means cluster" interactive algorithm-based evolutionary approach for solving bilevel multiobjective programming problems" Alexandria Engineering Journal, doi.org/10.1016/j.aej.2021.04.098.
- 32- Yousria A. Elnaga, Moustafa K. El-sayed, Ali S. Shehab, (2021)" A Study on Nash Min-Max Hybrid Continuous Static Games Under Fuzzy Environment", Mathematical Sciences Letters, 10, No. 2, 59-69 (2021).
- 33-- Abd Elazeem M. Abd Elazeem, Abd Allah A Mousa, Mohammed A. El-Shorbagy, Sayed K Elagan and **Yousria Abo-Elnaga** (2021)"Detecting All Non- Dominated Points for Multi-ObjectiveMulti-Index Transportation Problems" Sustainability 2021,13, 1372. doi.org/10.3390/su13031372.
- 34- Bothina El-Sobky, <u>Yousria Abo-Elnaga</u>, Abd Allah A. Mousa, and Mohamed A. El-Shorbagy (2022) "Trust-Region Based Penalty Barrier Algorithm for Constrained Nonlinear Programming Problems: An Application of Design of Minimum Cost Canal Sections" Mathematics 2021, 9, 1551; ISSN: 2227-7390. https://doi.org/10.3390/math9131551

Certifications or Professional Registrations:

Honors and Awards:

SUPERVION OF MASTER THESIS

1- Hend A. Al-Huthiali "on stochastic linear programming problems and applications probability, Faculty of Science, Taibah University, Al-Madinah, King of Saudi Arabia, 2012.

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- 2- Azezah, F.m. Alsaedi, "Utilization of Chi Square Tests in Educational area", Faculty of Science, Taibah University, Al-Madinah, King of Saudi Arabia, 2013.
- 3- Thoria Elnamakani, "on Factors Affecting on Correlation Coefficient and Applications ", Faculty of Science, Taibah University, Al-Madinah, King of Saudi Arabia, 2014.

SUPERVION OF PHD THESIS

- 1- Ebtisam Hrebish, Faculty of Science, Alexandria university, Alexandria, Egypt (Phd2016).
- 2- Sarah Naser, faculty of Engineering, Sheben Elkom, Mnofia University (Phd2020).
- **3- Mai Ziedan,** Faculty of Engineering, Tanta University, Tanta, Egypt (Phd2021).
- **4- Ahmed Fonda,** Faculty of Engineering, Mansoura University, Mansoura, Egypt (Phd-Tell now).

ARBITRATION THESIS

- **1-** Noha .O. Fallatah," Faculty of Science, Taibah University, Al-Madinah, King of Saudi Arabia, (M.S.C.2013).
- **2-** Aminah F.M.Alsaedi", Faculty of Science, Taibah University, Al-Madinah, King of Saudi Arabia, (M.S.C.2013).
- **3-** Mostafa E. Hassan," Department of Mathematics and computer science, Faculty of Science, Alexandria University, (M.S.C 2022).
- **4-** Sarah Mostafa Mohamed, "Department of Mathematics and computer science, Faculty of Science, Alexandria University, (M.S.C 2022).

ATTEND CONFERENCES

- **1-** 8th International Conference on Parametric Optimization (PARAOPT VIII) Nov 27th-Dec 3rd -2005.
- **2-** . Fourth Saudi Science Conference Contribution of Science Faculties in the Development Process of KSA Al-Madinah Al-Munawwarah, March 21 24, 2010.
- **3-** The 5th Symposium of the Fractional Calculus and Applications Group, Faculty of Science- Alexandria University, July 3, 2013.
- **4-** The 7th Symposium of the Fractional Calculus and Applications Group, Faculty of Science- Alexandria University, July 25, 2015.
- **5-** The international conference for Mathematics and Applications, The Egyptian Mathematical Society, 28-30 Dec. 2017.





Teaching Experience:

- 1- Workshop "Programs and Syllabuses Description sponsored by vice university presidency for Development & Quality Assurance in collaboration with National Commission for Academic Accreditation & Assessment", Taibah University, April, 27-28th, 2010, Al-Madinah Al-Munawarah, Kingdom of Saudi Arabia.
- 2- Workshop " Effective ways to assess students for Quality Assurance Unit", Faculty of science, Taibah University, April, 23th, 2012, Al-Madinah Al-Munawarah, Kingdom of Saudi Arabia.
- 3- Workshop "Writing and characterization report scheduled according to the National Assessment and Accreditation", Faculty of science, Taibah University, 20/5/1432, Al-Madinah Al-Munawarah, Kingdom of Saudi Arabia.
- 4- Workshop "Introduction to Quality and Accreditation", Faculty of science, Taibah University, 24/12/1432, Al-Madinah Al-Munawarah, Kingdom of Saudi Arabia.
- 5- Training course "Exam systems and student assessment for colleges and institutes of higher education" The National Authority for Quality Assurance and Accreditation, 30-31 March 2021.
- 6- Training course "Effective teaching and learning strategies for colleges and institutes of higher education" The National Authority for Quality Assurance and Accreditation, 30-31 August 2021.
- 7- Training course "Basics of Blended Education", Faculty Development Center, Cairo University, 31Jan.2022-1 Feb.2022.





Courses taught

	Course name	degree
1	Calculus I	Engineering programs (Egypt)
		Mathematics program (k.s.a)
		Computer science (k.s.a)
2	Calculus II	Engineering programs (Egypt)
		Mathematics program (k.s.a)
		Computer science (k.s.a)
3	Advanced calculus	Engineering programs (Egypt)
		Mathematics program (k.s.a)
		Computer science (k.s.a)
4	Numerical methods	Engineering programs (Egypt)
		Mathematics program (k.s.a)
5	Complex analysis	Engineering programs (Egypt)
		Mathematics program (k.s.a)
6	Statistics and probability	Engineering programs (Egypt)
		Mathematics program (k.s.a)
		Computer science (k.s.a)
7	Operation research	Computer science (Egypt)
		Mathematics program (k.s.a)
8	Artificial intelligent	Computer science (Egypt)



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9	Game programming	Graduate studies
10	Dynamic programming	Graduate studies
11	Convex programming	Graduate studies
12	Nonlinear optimization	Graduate studies