



Essam H. Houssein

<https://orcid.org/0000-0002-8127-7233>

<https://www.researchgate.net/profile/Essam-Houssein>

<https://scholar.google.com/citations?user=UScKJW4AAAAJ&hl=en>

Affiliation:

Dr. Essam Halim Houssein,
Associate Professor of Computer Science,
Vice Dean for Postgraduate Studies and Research Affairs,
Faculty of Computers & Information,
Minia University, Minia 61519, Egypt.

Personal Details:

- **Nationality,** Egyptian
- **Marital Status,** Married
- **Languages,** Arabic and English
- **Address,** Egypt – El-Minia – Bany Mazar – El-Galaa street
- **Mobile,** +2 0100 86 58057
- **E-mail,** essam.halim@mu.edu.eg & esam.halim@fci.bu.edu.eg
- **Last Job Title,** Associate Professor
- **Academic specification:** Artificial Intelligence

Awards:

- **2021, Top 2% researcher list of Stanford University, USA**
- **2021, First rank in publishing Q1 (web od science) from Minia University**

Academic Accounts

Metrics	ID	H-Index	Total Publications	Citations
Web of Science	C-8941-2016	20	97	1283
Scopus	SC: 43361385400 ORCID: /0000-0002-8127-7233	25	125	1966
Google Scholar	https://scholar.google.com/citations?user=UScKJW4AAAAJ&hl=en	30	147	2786
ResearchGate	https://www.researchgate.net/profile/Essam-Houssein	41.8	161	2759

Academic Degrees

- **Associate Professor, Computer science, Feb 2018.**
Faculty of Computers and Information, Computer Science Dept., Minia University, Minia, Egypt.
- **Ph.D. in Computer Science, Jan 2012.**
Faculty of Science, Computer Science Dept, Minia University, Minia, Egypt.
Title: "Studying Some Routing Problems of Mobile Ad Hoc Networks using Artificial Ant Colony".
- **M. Sc. in Computer Science, Oct 2004.**
Faculty of Science, Computer Science Dept, Minia University, Minia, Egypt.
- **B. Sc. in Computer Science, June 1997.**
Faculty of Science, Computer Science Dept, Minia University, Minia, Egypt.

Academic Experience

- [Feb 2018 – Present], **Associate Professor**, Computer Science Department, Faculty of Computers and Information, Minia University, Egypt.
- [Sep 2015 – Feb 2018], **Lecturer**, Computer Science Department, Faculty of Computers and Information, Minia University, Egypt.
- [Jan 2012 – Sep 2015], **Lecturer**, Computer Science Department, Faculty of Computers and Informatics, Benha University, Egypt.
- [Feb 2010 - 2011], **Lecturer Assistant**, Computer Science Department, Faculty of Computers and Informatics, Benha University, Egypt.
- [Feb 2008 – Jan 2010], **Lecturer Assistant** in Computer Science Department, Thebes Higher Institute for Computer and Management Science, Thebes Academy, Cairo, Egypt.
- [1999 – 2007] **Teaching Assistant** in Computer Science Department, Faculty of Science, Minia University, Minia, Egypt.

Work Experience and Academic position

- Vice Dean of Postgraduate studies and research affairs, [Apr 2018 - Present], Faculty of Computers and Information, Minia University.
- Department Chair, [September 2018- Present], Computer Science Dept., Faculty of Computers and Information, Minia University.
- Director, Quality Assurance & Accreditation Unit, [April 2011 – September 2015], Faculty of Computers and Informatics, Benha University, Egypt.
- Director, IT Unit, [Sep 2012 - 2015], Faculty of Computers and Informatics, Benha University, Egypt.
- Executive director, Continuous Improvement and Quality for Accreditation Project (8th CIQAP), Faculty of Computers and Informatics, Benha University, Egypt.

Research Description

1- PhD Thesis description:

- May 2006 – Jan 2012, PhD degree in the field of "Artificial Intelligence" and it is titled "Study of Some Routing Algorithms for Ad Hoc Networks Using Ant Colony", in Computer Science Department, Faculty of Science, Minia University, and El Minia, Egypt. This Research is preliminary aiming to:
 - Preparing a survey about Ant Colony Optimization (ACO) techniques and its application to adaptive routing in telecommunication networks.
 - Preparing a survey about Mobile Ad hoc Networks (MANETs).
 - Studying the convergence property of a family of distributed routing algorithms based on the ant colony.
 - Analyzing AntNet and proposes improvements that were implemented, comparing their performance with respect to the original AntNet and other routing algorithms.

Publications

A. Published New Algorithms:

- [1] Hashim, Fatma A., Essam H. Houssein, Kashif Hussain, Mai S. Mabrouk, and Walid Al-Atabany. "Honey Badger Algorithm: New metaheuristic algorithm for solving optimization problems." *Mathematics and Computers in Simulation* 192 (2022): 84-110.
- [2] Hashim, Fatma A., Kashif Hussain, Essam H. Houssein, Mai S. Mabrouk, and Walid Al-Atabany. "Archimedes optimization algorithm: a new metaheuristic algorithm for solving optimization problems." *Applied Intelligence* 51, no. 3 (2021): 1531-1551.
- [3] Houssein, Essam H., Mohammed R. Saad, Fatma A. Hashim, Hassan Shaban, and M. Hassaballah. "Lévy flight distribution: A new metaheuristic algorithm for solving engineering optimization problems." *Engineering Applications of Artificial Intelligence* 94 (2020): 103731.
- [4] Hashim, Fatma A., Essam H. Houssein, Mai S. Mabrouk, Walid Al-Atabany, and Seyedali Mirjalili. "Henry gas solubility optimization: a novel physics-based algorithm." *Future Generation Computer Systems* 101 (2019): 646-667.

B. Published publications:

2022

Journal Papers

- [5] Houssein, Essam H., Zainab Abohashima, Mohamed Elhoseny, and Waleed M. Mohamed. "Hybrid quantum-classical convolutional neural network model for COVID-19 prediction using chest X-ray images." *Journal of Computational Design and Engineering* 9, no. 2 (2022): 343-363.
- [6] AbdElminaam, Diaa Salama, Essam H. Houssein, Mokhtar Said, Diego Oliva, and Ayman Nabil. "An Efficient Heap-Based Optimizer for Parameters Identification of Modified Photovoltaic Models." *Ain Shams Engineering Journal* 13, no. 5 (2022): 101728.
- [7] Houssein, Essam H., Ibrahim E. Ibrahim, Mohammed Kharrich, and Salah Kamel. "An improved marine predators algorithm for the optimal design of hybrid renewable energy systems." *Engineering Applications of Artificial Intelligence* 110 (2022): 104722.
- [8] Singh, Narinder, Essam H. Houssein, S. B. Singh, and Gaurav Dhiman. "HSSAHHO: a novel hybrid Salp Swarm-Harris Hawks optimization algorithm for complex engineering problems." *Journal of Ambient Intelligence and Humanized Computing* (2022): 1-37.
- [9] Said, Mokhtar, Essam H. Houssein, Sanchari Deb, Amel A. Alhussan, and Rania M. Ghoniem. "A Novel Gradient Based Optimizer for Solving Unit Commitment Problem." *IEEE Access* (2022).
- [10] Houssein, Essam H., Zainab Abohashima, Mohamed Elhoseny, and Waleed M. Mohamed. "Machine learning in the quantum realm: The state-of-the-art, challenges, and future vision." *Expert Systems with Applications* (2022): 116512.
- [11] Thaher, Thaer, Hamouda Chantar, Jingwei Too, Majdi Mafarja, Hamza Turabieh, and Essam H. Houssein. "Boolean Particle Swarm Optimization with various Evolutionary Population Dynamics approaches for feature selection problems." *Expert Systems with Applications* (2022): 116550.
- [12] Houssein, Essam H., Emre Çelik, Mohamed A. Mahdy, and Rania M. Ghoniem. "Self-adaptive Equilibrium Optimizer for solving global, combinatorial, engineering, and multi-Objective problems." *Expert Systems with Applications* (2022): 116552.
- [13] Houssein, Essam H., Bahaa El-din Helmy, Hegazy Rezk, and Ahmed M. Nassef. "An efficient orthogonal opposition-based learning slime mould algorithm for maximum power point tracking." *Neural Computing and Applications* (2022): 1-25.
- [14] Houssein, Essam H., Fatma A. Hashim, Seydali Ferahtia, and Hegazy Rezk. "Battery parameter identification strategy

- based on modified coot optimization algorithm." *Journal of Energy Storage* 46 (2022): 103848.
- [15] Abd Elminaam, Diaa Salama, Shamaa Abdallah Ibrahim, Essam H. Houssein, and Salah M. Elsayed. "An Efficient Chaotic Gradient-Based Optimizer for Feature Selection." *IEEE Access* (2022).
- [16] Houssein, Essam H., Bahaa El-din Helmy, Diego Oliva, Pradeep Jangir, M. Premkumar, Ahmed A. Elngar, and Hassan Shaban. "An efficient multi-thresholding based COVID-19 CT images segmentation approach using an improved equilibrium optimizer." *Biomedical Signal Processing and Control* 73 (2022): 103401.
- [17] Houssein, Essam H., Eman Saber, and Yaser M. Wazery. "Centroid mutation-based Search and Rescue optimization algorithm for feature selection and classification." *Expert Systems with Applications* (2022): 116235.
- [18] Houssein, Essam H., Mahmoud Dirar, Laith Abualigah, and Waleed M. Mohamed. "An efficient equilibrium optimizer with support vector regression for stock market prediction." *Neural Computing and Applications* (2022): 1-36.
- [19] Houssein, Essam H., M. Hassaballah, Ibrahim E. Ibrahim, Diaa Salama AbdElminaam, and Yaser M. Wazery. "An automatic arrhythmia classification model based on improved Marine Predators Algorithm and Convolutions Neural Networks." *Expert Systems with Applications* 187 (2022): 115936.
- [20] Houssein, Essam H., Mohamed A. Mahdy, Maude J. Blondin, Doaa Shebl, and Waleed M. Mohamed. "An Efficient Slime Mould Algorithm for Solving Multi-Objective Optimization Problems." *Expert Systems with Applications* 187 (2022): 114689.
- [21] Ismaeel, Alaa AK, Essam H. Houssein, Amir Y. Hassan, and Mokhtar Said. "Performance of Gradient-Based Optimizer for Optimum Wind Cube Design." *Computers, Materials & Continua*, DOI:10.32604/cmc.2022.021517

Conference and Book Chapters

- [22] Houssein, Essam H., Eman Saber, Abdelmgeid A. Ali, and Yaser M. Wazery. "Opposition-based learning tunicate swarm algorithm for biomedical classification." *In 2021 17th International Computer Engineering Conference (ICENCO)*, pp. 1-6. IEEE, 2021.
- [23] Mohamed, Takwa, Sabah Sayed, Akram Salah, and Essam H. Houssein. "Next Generation Sequence Prediction Intelligent System for SARS-COV-2 Using Deep Learning Neural Network." *In 2021 17th International Computer Engineering Conference (ICENCO)*, pp. 88-93. IEEE, 2021.
- [24] Younan, Mina, Mohamed Elhoseny, Abdelmgeid A. Ali, and Essam H. Houssein. "Quantum Chain of Things (QCoT): A New Paradigm for Integrating Quantum Computing, Blockchain, and Internet of Things." *In 2021 17th International Computer Engineering Conference (ICENCO)*, pp. 101-106. IEEE, 2021.
- [25] Houssein, Essam H., Zainab Abohashima, Mohamed Elhoseny, and Waleed M. Mohamed. "An efficient binary harris hawks optimization based on quantum SVM for cancer classification tasks." *The 2nd International Conference on Distributed Sensing and Intelligent Systems (ICDSIS 2021)*, 2021 p. 247 – 258

2021

Journal Papers

- [26] Houssein, Essam H., Hager N. Hassan, Mustafa M. Al-Sayed, and Emad Nabil. "Gene Selection for Microarray Cancer Classification based on Manta Rays Foraging Optimization and Support Vector Machines." *Arabian Journal for Science and Engineering* (2021): 1-18.
- [27] Houssein, Essam H., Rehab E. Mohamed, and Abdelmgeid A. Ali. "Machine Learning Techniques for Biomedical Natural Language Processing: A comprehensive Review." *IEEE Access* (2021).
- [28] Houssein, Essam H., Marwa M. Emam, and Abdelmgeid A. Ali. "An efficient multilevel thresholding segmentation method for thermography breast cancer imaging based on improved chimp optimization algorithm." *Expert Systems with Applications* 185 (2021): 115651.
- [29] Houssein, Essam H., Kashif Hussain, Laith Abualigah, Mohamed Abd Elaziz, Waleed Alomoush, Gaurav Dhiman, Youcef Djenouri, and Erik Cuevas. "An improved opposition-based marine predators algorithm for global optimization and multilevel thresholding image segmentation." *Knowledge-Based Systems* 229 (2021): 107348.
- [30] Shaban, Hassan, Essam H. Houssein, Marco Pérez-Cisneros, Diego Oliva, Amir Y. Hassan, Alaa AK Ismaeel, Diaa Salama AbdElminaam, Sanchari Deb, and Mokhtar Said. "Identification of Parameters in Photovoltaic Models through a Runge Kutta Optimizer." *Mathematics* 9, no. 18 (2021): 2313.
- [31] Houssein, Essam H., Gamela Nageh, Mohamed Abd Elaziz, and Eman Younis. "An efficient Equilibrium Optimizer for parameters identification of photovoltaic modules." *PeerJ Computer Science* 7 (2021): e708.
- [32] Wazery, Yaser M., Eman Saber, Essam H. Houssein, Abdelmgeid A. Ali, and Eslam Amer. "An Efficient Slime Mould Algorithm Combined with k-Nearest Neighbor for Medical Classification Tasks." *IEEE Access* (2021).
- [33] Houssein, Essam H., Fatma A. Hashim, Seydali Ferahtia, and Hegazy Rezk. "An efficient modified artificial electric field algorithm for solving optimization problems and parameter estimation of fuel cell." *International Journal of Energy Research* (2021).
- [34] Houssein, Essam H., Marwa M. Emam, and Abdelmgeid A. Ali. "Improved manta ray foraging optimization for multi-level thresholding using COVID-19 CT images." *Neural Computing and Applications* (2021): 1-21.
- [35] Mohamed, Takwa, Sabah Sayed, Akram Salah, and Essam H. Houssein. "Long Short-Term Memory Neural Networks for RNA Viruses Mutations Prediction." *Mathematical Problems in Engineering* 2021 (2021).
- [36] Houssein, Essam H., Mohamed A. Mahdy, Ahmed Fathy, and Hegazy Rezk. "A modified Marine Predator Algorithm based on opposition based learning for tracking the global MPP of shaded PV system." *Expert Systems with Applications* 183 (2021): 115253.
- [37] Houssein, Essam H., Ibrahim E. Ibrahim, Nabil Naggaz, M. Hassaballah, and Yaser M. Wazery. "An efficient ECG arrhythmia classification method based on Manta ray foraging optimization." *Expert Systems with Applications* 181 (2021): 115131.
- [38] Houssein, Essam H., Gamela Nageh Zaki, Ahmed A. Zaki Diab, and Eman MG Younis. "An efficient Manta Ray Foraging Optimization algorithm for parameter extraction of three-diode photovoltaic model." *Computers & Electrical Engineering* 94 (2021): 107304.
- [39] Houssein, Essam H., Bahaa El-din Helmy, Hegazy Rezk, and Ahmed M. Nassef. "An enhanced Archimedes optimization algorithm based on Local escaping operator and Orthogonal learning for PEM fuel cell parameter

- identification." *Engineering Applications of Artificial Intelligence* 103 (2021): 104309.
- [40] Hussain, Kashif, Nabil Neggaz, William Zhu, and Essam H. Houssein. "An efficient hybrid sine-cosine Harris hawks optimization for low and high-dimensional feature selection." *Expert Systems with Applications* 176 (2021): 114778.
- [41] Houssein, Essam H., Mohamed A. Mahdy, Maude J. Blondin, Doaa Shebl, and Waleed M. Mohamed. "Hybrid slime mould algorithm with adaptive guided differential evolution algorithm for combinatorial and global optimization problems." *Expert Systems with Applications* 174 (2021): 114689.
- [42] Korashy, Ahmed, Salah Kamel, Essam H. Houssein, Francisco Jurado, and Fatma A. Hashim. "Development and Application of Evaporation Rate Water Cycle Algorithm for Optimal Coordination of Directional Overcurrent Relays." *Expert Systems with Applications* (2021): 115538.
- [43] Houssein, Essam H., Ahmed G. Gad, Kashif Hussain, and Ponnuthurai Nagarathnam Suganthan. "Major Advances in Particle Swarm Optimization: Theory, Analysis, and Application." *Swarm and Evolutionary Computation* (2021): 100868.
- [44] Houssein, Essam H., Mahmoud Dirar, Kashif Hussain, and Waleed M. Mohamed. "Assess deep learning models for Egyptian exchange prediction using nonlinear artificial neural networks." *Neural Computing and Applications* 33, no. 11 (2021): 5965-5987.
- [45] Belhadi, Asma, Youcef Djenouri, Vicente Garcia Diaz, Essam H. Houssein, and Jerry Chun-Wei Lin. "Hybrid intelligent framework for automated medical learning." *Expert Systems* (2021).
- [46] Houssein, Essam H., Nabil Neggaz, Mosa E. Hosney, Waleed M. Mohamed, and M. Hassaballah. "Enhanced Harris hawks optimization with genetic operators for selection chemical descriptors and compounds activities." *Neural Computing and Applications* (2021): 1-18.
- [47] Younan, Mina, Essam H. Houssein, Mohamed Elhoseny, and Abd El-mageid Ali. "Performance analysis for similarity data fusion model for enabling time series indexing in internet of things applications." *PeerJ Computer Science* 7 (2021): e500.
- [48] Houssein, Essam H., Daaa Salama Abdelminaam, Hager N. Hassan, Mustafa M. Al-Sayed, and Emad Nabil. "A Hybrid Barnacles Mating Optimizer Algorithm With Support Vector Machines for Gene Selection of Microarray Cancer Classification." *IEEE Access* 9 (2021): 64895-64905.
- [49] Houssein, Essam H., Daaa Salama Abdelminaam, Ibrahim E. Ibrahim, M. Hassaballah, and Yaser M. Wazery. "A Hybrid Heartbeats Classification Approach Based on Marine Predators Algorithm and Convolution Neural Networks." *IEEE Access* (2021).
- [50] Deb, Sanchari, Essam H. Houssein, Mokhtar Said, and Daaa Salama Abdelminaam. "Performance of Turbulent Flow of Water Optimization on Economic Load Dispatch Problem." *IEEE Access* (2021).
- [51] Abd Elminaam, Daaa Salama, Ayman Nabil, Shimaa Abdallah Ibrahim, and Essam H. Houssein. "An Efficient Marine Predators Algorithm for Feature Selection." *IEEE Access* (2021).
- [52] Houssein, Essam H., Bahaa El-Din Helmy, Ahmed A. Elngar, Daaa Salama Abdelminaam, and Hassan Shaban. "An Improved Tunicate Swarm Algorithm for Global Optimization and Image Segmentation." *IEEE Access* 9 (2021): 56066-56092.
- [53] Dhiman, Gaurav, Krishna Kant Singh, Mukesh Soni, Atulya Nagar, Mohammad Dehghani, Adam Slowik, Amandeep Kaur, Ashutosh Sharma, Essam H. Houssein, and Korhan Cengiz. "MOSOA: a new multi-objective seagull optimization algorithm." *Expert Systems with Applications* 167 (2021): 114150.
- [54] Houssein, Essam H., Bahaa El-din Helmy, Diego Oliva, Ahmed A. Elngar, and Hassan Shaban. "A novel Black Widow Optimization algorithm for multilevel thresholding image segmentation." *Expert Systems with Applications* 167 (2021): 114159.
- [55] Deb, Sanchari, Daaa Salama Abdelminaam, Mokhtar Said, and Essam H. Houssein. "Recent Methodology-Based Gradient-Based Optimizer for Economic Load Dispatch Problem." *IEEE Access* 9 (2021): 44322-44338.
- [56] Houssein, Essam H., Mohammed M. Ahmed, Mohamed Abd Elaziz, Ahmed A. Ewees, and Rania M. Ghoniem. "Solving Multi-Objective Problems Using Bird Swarm Algorithm." *IEEE Access* 9 (2021): 36382-36398.
- [57] Houssein, Essam H., Mohamed A. Mahdy, Manal G. Eldin, Doaa Shebl, Waleed M. Mohamed, and Mahmoud Abdel-Aty. "Optimizing quantum cloning circuit parameters based on adaptive guided differential evolution algorithm." *Journal of Advanced Research* 29 (2021): 147-157.
- [58] Abdelminaam, Daaa Salama, Mokhtar Said, and Essam H. Houssein. "Turbulent Flow of Water-based Optimization Using New Objective Function for Parameter Extraction of Six Photovoltaic Models." *IEEE Access* (2021).
- [59] Abdelminaam, Daaa Salama, Fatma Helmy Ismail, Mohamed Taha, Ahmed Taha, Essam H. Houssein, and Ayman Nabil. "CoAID-DEEP: An Optimized Intelligent Framework for Automated Detecting COVID-19 Misleading Information on Twitter." *IEEE Access* 9 (2021): 27840-27867.
- [60] Houssein, Essam H., Ahmed G. Gad, Yaser M. Wazery, and Ponnuthurai Nagarathnam Suganthan. "Task Scheduling in cloud computing based on meta-heuristics: review, taxonomy, open challenges, and future trends." *Swarm and Evolutionary Computation* (2021): 100841.
- [61] Ismaeel, Alaa AK, Essam H. Houssein, Diego Oliva, and Mokhtar Said. "Gradient-Based Optimizer for Parameter Extraction in Photovoltaic Models." *IEEE Access* 9 (2021): 13403-13416.
- [62] Hassan, Mohamed H., Essam H. Houssein, Mohamed A. Mahdy, and Salah Kamel. "An improved Manta ray foraging optimizer for cost-effective emission dispatch problems." *Engineering Applications of Artificial Intelligence* 100 (2021): 104155.
- [63] Houssein, Essam H., Marwa M. Emam, Abdelmgeid A. Ali, and Ponnuthurai Nagarathnam Suganthan. "Deep and machine learning techniques for medical imaging-based breast cancer: A comprehensive review." *Expert Systems with Applications* (2021): 114161.

Conference and Book Chapters

- [64] Houssein, Essam H., Mosa E. Hosney, and Diego Oliva. "A hybrid seagull optimization algorithm for chemical descriptors classification." In *2021 International Mobile, Intelligent, and Ubiquitous Computing Conference (MIUCC)*, pp. 1-6. IEEE, 2021.
- [65] Younan, Mina, Essam H. Houssein, Mohamed Elhoseny, and Abd El-mageid A. Ali. "Improved Models for Time Series Cluster Representation Based Dynamic Time Warping." In *2020 15th International Conference on Computer Engineering*

- and Systems (ICCES), pp. 1-6. IEEE, 2020.
- [66] Houssein, Essam H., Muhammad Ahmad, Mosa E. Hosney, and Manuel Mazzara. "Classification Approach for COVID-19 Gene Based on Harris Hawks Optimization." *In Artificial Intelligence for COVID-19*, pp. 575-594. Springer, Cham, 2021.
- [67] Houssein, Essam H., Bahaa El-din Helmy, Diego Oliva, Ahmed A. Elngar, and Hassan Shaban. "Multi-level Thresholding Image Segmentation Based on Nature-Inspired Optimization Algorithms: A Comprehensive Review." *Metaheuristics in Machine Learning: Theory and Applications* (2021): 239-265.
- [68] Houssein, Essam H., Mohammed R. Saad, Kashif Hussain, Hassan Shaban, and M. Hassaballah. "A Review of Metaheuristic Optimization Algorithms in Wireless Sensor Networks." *Metaheuristics in Machine Learning: Theory and Applications* (2021): 193-217.
- [69] Houssein, Essam H., Mohamed A. Mahdy, Doaa Shebl, and Waleed M. Mohamed. "A Survey of Metaheuristic Algorithms for Solving Optimization Problems." *In Metaheuristics in Machine Learning: Theory and Applications*, pp. 515-543. Springer, Cham, 2021.
- [70] Houssein, Essam H., Mahmoud Dirar, Kashif Hussain, and Waleed M. Mohamed. "Artificial Neural Networks for Stock Market Prediction: A Comprehensive Review." *Metaheuristics in Machine Learning: Theory and Applications* (2021): 409-444.
- [71] Houssein, Essam H., Mosa E. Hosney, Diego Oliva, Waleed M. Mohamed, and M. Hassaballah. "Drug Design and Discovery: Theory, Applications, Open Issues and Challenges." *In Metaheuristics in Machine Learning: Theory and Applications*, pp. 337-358. Springer, Cham, 2021.
- [72] Houssein, Essam H., Ibrahim E. Ibrahim, M. Hassaballah, and Yaser M. Wazery. "Integration of Internet of Things and Cloud Computing for Cardiac Health Recognition." *In Metaheuristics in Machine Learning: Theory and Applications*, pp. 645-661. Springer, Cham, 2021.
- [73] Houssein, Essam H., Ahmed G. Gad, and Yaser M. Wazery. "Jaya algorithm and applications: A comprehensive review." *Metaheuristics and Optimization in Computer and Electrical Engineering*, Springer (2021): 3-24.

2020

Journal Papers

- [74] Abualigah, Laith, Amir H. Gandomi, Mohamed Abd Elaziz, Abdelazim G. Hussien, Ahmad M. Khasawneh, Mohammad Alshinwan, and Essam H. Houssein. "Nature-inspired optimization algorithms for text document clustering—a comprehensive analysis." *Algorithms* 13, no. 12 (2020): 345.
- [75] Singh, Narinder, S. B. Singh, Essam H. Houssein, and Muhammad Ahmad. "COVID-19: risk prediction through nature inspired algorithm." *World Journal of Engineering* (2020).
- [76] Younan, Mina, Mohamed Elhoseny, Abd El-mageid A. Ali, and Essam H. Houssein. "Data Reduction Model for Balancing Indexing and Securing Resources in the Internet of Things Applications." *IEEE Internet of Things Journal* (2020).
- [77] Hussien, Abdelazim G., Diego Oliva, Essam H. Houssein, Angel A. Juan, and Xu Yu. "Binary Whale Optimization Algorithm for Dimensionality Reduction." *Mathematics* 8, no. 10 (2020): 1821.
- [78] Singh, Narinder, S. B. Singh, and Essam H. Houssein. "Hybridizing salp swarm algorithm with particle swarm optimization algorithm for recent optimization functions." *Evolutionary Intelligence* (2020): 1-34.
- [79] Houssein, Essam H., Mosa E. Hosney, Mohamed Elhoseny, Diego Oliva, Waleed M. Mohamed, and M. Hassaballah. "Hybrid Harris hawks optimization with cuckoo search for drug design and discovery in chemoinformatics." *Scientific Reports* 10, no. 1 (2020): 1-22.
- [80] Avalos, Omar, Erik Cuevas, Jorge Gálvez, Essam H. Houssein, and Kashif Hussain. "Comparison of Circular Symmetric Low-Pass Digital IIR Filter Design Using Evolutionary Computation Techniques." *Mathematics* 8, no. 8 (2020): 1226.
- [81] Neggaz, Nabil, Essam H. Houssein, and Kashif Hussain. "An efficient Henry Gas Solubility Optimization for Feature Selection." *Expert Systems with Applications* (2020): 113364.
- [82] Hashim, Fatma A., Essam H. Houssein, Kashif Hussain, Mai S. Mabrouk, and Walid Al-Atabany. "A modified Henry gas solubility optimization for solving motif discovery problem." *Neural Computing and Applications* 32, no. 14 (2020): 10759-10771.
- [83] Mualla, Noor, Essam H. Houssein, and M. R. Hassan. "Dental Age Estimation Based on X-ray Images." *CMC-COMPUTERS MATERIALS & CONTINUA* 62, no. 2 (2020): 591-605.
- [84] Houssein, Essam H., Mosa E. Hosney, Diego Oliva, Waleed M. Mohamed, and M. Hassaballah. "A Novel Hybrid Harris Hawks Optimization and Support Vector Machines for Drug Design and Discovery." *Computers & Chemical Engineering* (2020), Vol. 133: 106656.
- [85] Younan, Mina, Essam H. Houssein, Mohamed Elhoseny, and Abdelmgeid A. Ali. "Challenges and Recommended Technologies for the Industrial Internet of Things: A Comprehensive Review." *Measurement* (2020): 107198.
- [86] Houssein, Essam H., Mohammed R. Saad, Kashif Hussain, William Zhu, Hassan Shaban, and M. Hassaballah. "Optimal Sink Node Placement in Large Scale Wireless Sensor Networks Based on Harris' Hawk Optimization Algorithm." *IEEE Access* 8 (2020): 19381-19397.

Conference and Book Chapters

- [87] Hedaia, Omar Ahmed, Ahmed Shawish, Essam H. Houssein, and Hala Zayed. "Bio-CAPTCHA Voice-Based Authentication Technique for Better Security and Usability in Cloud Computing." *International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)* 11, no. 2 (2020): 59-79.
- [88] Younan, Mina, Essam H. Houssein, Mohamed Elhoseny, and Abd El-mageid A. Ali. "Improved Models for Time Series Cluster Representation Based Dynamic Time Warping." *In 2020 15th International Conference on Computer Engineering and Systems (ICCES)*, pp. 1-6. IEEE, 2020.
- [89] Houssein, Essam H., Ibrahim E. Mohamed, and Aboul Ella Hassanien. "Salp Swarm Algorithm: Tutorial." *In Swarm Intelligence Algorithms*, pp. 279-292. CRC Press, 2020.
- [90] Houssein, Essam H., Ibrahim E. Mohamed, and Aboul Ella Hassanien. "Salp Swarm Algorithm: Modification and Application." *In Swarm Intelligence Algorithms*, pp. 285-299. CRC Press, 2020.
- [91] Houssein, Essam H., Ibrahim E. Mohamed, and Yaser M. Wazery. "Salp Swarm Algorithm: A Comprehensive Review." *In Applications of Hybrid Metaheuristic Algorithms for Image Processing*, Springer, Cham, pp. 285-308,

2019

- [92] ElShaarawy, Islam A., Essam H. Houssein, Fatma Helmy Ismail, and Aboul Ella Hassanien. "An exploration-enhanced elephant herding optimization." *Engineering Computations* (2019).
- [93] Hussien, Abdelazim G., Aboul Ella Hassanien, Essam H. Houssein, Mohamed Amin, and Ahmad Taher Azar. "New binary whale optimization algorithm for discrete optimization problems." *Engineering Optimization* (2019): 1-15.
- [94] Houssein, Essam H., Asmaa Hamad, Aboul Ella Hassanien, and Aly A. Fahmy. "Epileptic detection based on whale optimization enhanced support vector machine." *Journal of Information and Optimization Sciences* 40, no. 3 (2019): 699-723.
- [95] Ismaeel, Alaa AK, Islam A. Elshaarawy, Essam H. Houssein, Fatma Helmy Ismail, and Aboul Ella Hassanien. "Enhanced Elephant Herding Optimization for Global Optimization." *IEEE Access* 7 (2019): 34738-34752.
- [96] Ahmed, Mohammed M., Essam H. Houssein, Aboul Ella Hassanien, Ayman Taha, and Ehab Hassanien. "Maximizing lifetime of large-scale wireless sensor networks using multi-objective whale optimization algorithm." *Telecommunication Systems* (2019): 1-17.
- [97] Huthaifa M. Kanoosh, Essam Halim Houssein, and Mazen M. Selim, "Salp Swarm Algorithm for Node Localization in Wireless Sensor Networks," *Journal of Computer Networks and Communications*, vol. 2019, Article ID 1028723, 12 pages, 2019. <https://doi.org/10.1155/2019/1028723>.
- [98] Hussien, Abdelazim G., Aboul Ella Hassanien, Essam H. Houssein, Siddhartha Bhattacharyya, and Mohamed Amin. "S-shaped Binary Whale Optimization Algorithm for Feature Selection." *In Recent Trends in Signal and Image Processing*, pp. 79-87. Springer, Singapore, 2019.

Conference and Book Chapters

- [99] Houssein, Essam H. "Machine Learning and Meta-heuristic Algorithms for Renewable Energy: A Systematic Review." *Advanced Control and Optimization Paradigms for Wind Energy Systems*, pp. 165-187. Springer, 2019.
- [100] Essam H. Houssein, Mina Younan, Aboul Ella Hassanien, "Nature-Inspired Algorithms: A Comprehensive Review", *HCIRA 2019, CRC Press*.

2018

- [101] Wazery, Yaser Maher, Hager Saleh Mohammed, and Essam Halim Houssein. "Twitter Sentiment Analysis using Deep Neural Network." *In 2018 14th International Computer Engineering Conference (ICENCO)*, pp. 177-182. IEEE, 2018.
- [102] Ismail, Fatma Helmy, Essam H. Houssein, and Aboul Ella Hassanien. "Chaotic Bird Swarm Optimization Algorithm." *In International Conference on Advanced Intelligent Systems and Informatics*, pp. 294-303. Springer, Cham, 2018.
- [103] Houssein, Essam H., Ahmed A. Ewees, and Mohamed Abd ElAziz. "Improving Twin Support Vector Machine Based on Hybrid Swarm Optimizer for Heartbeat Classification." *Pattern Recognition and Image Analysis* 28, no. 2 (2018): 243-253.
- [104] Hassanien, Aboul Ella, Moataz Kilany, and Essam H. Houssein. "Combining Support Vector Machine and Elephant Herding Optimization for Cardiac Arrhythmias." *arXiv preprint arXiv:1806.08242* (2018).
- [105] Ewees, Ahmed A., Mohamed Abd Elaziz, and Essam H. Houssein. "Improved Grasshopper Optimization Algorithm using Opposition-based Learning." *Expert Systems with Applications* (2018).
- [106] Hassanien, Aboul Ella, Moataz Kilany, Essam H. Houssein, and Hameed AlQaheri. "Intelligent human emotion recognition based on elephant herding optimization tuned support vector regression." *Biomedical Signal Processing and Control* 45 (2018): 182-191.
- [107] Noor Mualla, Essam H. Houssein, Hala H. Zayed, "Face Age Estimation Approach Based on Deep Learning and Principle Component Analysis", (*IJACSA*) *International Journal of Advanced Computer Science and Applications*, Vol. 9, No. 2, 2018.
- [108] Essam H. Houssein. & Mohamed Abd-ELfattah. Multi-objective Modified Flower Pollination Algorithm for Maximizing Lifetime in Wireless Sensor Networks. *International Journal of Systems Signal Control and Engineering Application*, Vol 11(1), PP. 20-29, 2018.

Conference and Book Chapters

- [109] Asmaa Hamad, Essam Houssein, Aboul Ella Hassanien and Aly A. Fahmy, "Hybrid grasshopper optimization algorithm and support vector machines for automatic seizure detection in EEG Signals ", *3rd International Conference on Advanced Machine Learning Technologies and Applications (AMLT2018)* to be held at Cairo, during November 22-24 February 2018.
- [110] Ahmed Abdeldaim, Essam Houssein and Aboul Ella Hassanien. "Color Image Segmentation of Fishes with Complex Background in Water", *3rd International Conference on Advanced Machine Learning Technologies and Applications (AMLT2018)* to be held at Cairo, during November 22-24 February 2018.
- [111] Osama, Sarah, Essam H. Houssein, Ashraf Darwish, Aboul Ella Hassanien, and Aly A. Fahmy. "An Optimized Support Vector Regression Using Whale Optimization for Long Term Wind Speed Forecasting." *Hybrid Metaheuristics: Research And Applications* 84, pp. 171-196 (2018).
- [112] Hamad, Asmaa, Essam H. Houssein, Aboul Ella Hassanien, Aly A. Fahmy, and Siddhartha Bhattacharyya. "A Hybrid Gray Wolf Optimization and Support Vector Machines for Detection of Epileptic Seizure." *Hybrid Metaheuristics: Research And Applications* 84, pp. 197-225 (2018).
- [113] Mostafa, A., Houssein, E. H., Houseni, M., Hassanien, A. E., & Hefny, H. (2018). Evaluating Swarm Optimization Algorithms for Segmentation of Liver Images. *In Advances in Soft Computing and Machine Learning in Image Processing* (pp. 41-62). Springer, Cham.

2017

- [114] Houssein, Essam H., Aboul Ella Hassanien, and Alaa AK Ismaeel. "EEG signals classification for epileptic detection: a review." *Proceedings of the Second International Conference on Internet of things and Cloud Computing*. ACM, 2017.
- [115] Essam H. Houssein. & Mohamed Abd-ELfattah. The Decisional Visualized Toolkit for Crises Management based on Information Visualization. *International Journal of Soft Computing*, Vol. 11 (5-6), PP. 355-364, 2017.

- [116] Alaa Tharwat, Essam H. Houssein, Mohammed M. Ahmed, Aboul Ella Hassanien & Thomas Gabel. **MOGOA algorithm for constrained and unconstrained multi-objective optimization problems.** *Applied Intelligence Springer*. 2017.
- [117] Noor Mualla, Essam H. Houssein, Hala H. Zayed, "Automated Facial Age Estimation Using Deep Belief Network", *International Journal of Advancements in Computing Technology (IJACT)*, Vol. 9, No.3, 2017.
- [118] Essam H. Houssein & Yaser Maher Wazery. **Vortex Search Topology Control Algorithm for Wireless Sensor Networks.** *International Journal of Intelligent Engineering and Systems (IJIES)*, 2017.
- [119] Essam H. Houssein. **Particle swarm optimization enhanced twin support vector regression for wind speed forecasting.** *Journal of Intelligent Systems*. 2017.
- [120] Abdullah, Khalid M., Essam H. Houssein, and Hala H. Zayed. "Extended SPINS Framework for Security Wireless Sensor Network." *International Journal of Computer Science Issues (IJCSI)* 14, no. 2 (2017): 58.
- [121] Mlgheit, J. R., Houssein, E. H., & Zayed, H. H. (2017). **Security Model for Preserving Privacy over Encrypted Cloud Computing.** *Journal of Computer and Communications*, 5(06), 149.
- [122] Houssein, Essam H., Moataz Kilany, and Aboul Ella Hassanien. "ECG signals classification: a review." *International Journal of Intelligent Engineering Informatics* 5.4 (2017): 376-396.
- [123] Moataz kilany, Essam H Houssein, and Amr Badr, "Hybrid of Water Wave Optimization and Support Vector Machine to Improve EMG Signal Classification for Neurogenic Disorders", *12th IEEE International Conference on Computer Engineering and Systems (ICCES 2017)*, Cairo, Egypt, December 19-20, 2017.
- [124] Essam H Houssein, Abdelazim G. Hussien, Aboul Ella Hassanien, "A binary whale optimization algorithm with hyperbolic tangent fitness function for feature selection", *12th IEEE International Conference on Computer Engineering and Systems (ICCES 2017)*, Cairo, Egypt, December 19-20, 2017.
- [125] Essam H. Houssein, Abdelazim G. Hussien, Aboul Ella Hassanien, "A binary whale optimization algorithm with hyperbolic tangent fitness function for feature Selection", *12th IEEE International Conference on Computer Engineering and Systems (ICCES 2017)*, Cairo, Egypt, December 19-20, 2017.
- [126] Sarah Osama, Ashraf Darwish, Essam H. Houssein, Aboul Ella Hassanien, Aly A. Fahmy, and Ayman Mahrous2, "Forecast of Long-Term Wind Speed based on Optimized Support Vector Regression", *8th IEEE International Conference on Intelligent Computing and Information Systems (ICICIS 2017)*. Faculty of computer and information sciences, Ain Shams University, Egypt.
- [127] Abdelazim G. Hussien, Essam H. Houssein, Aboul Ella Hassanien and Mohamed Amin "Salp Swarm Algorithm for Predicting Chemical Activity", *8th IEEE International Conference on Intelligent Computing and Information Systems (ICICIS 2017)*. Faculty of computer and information sciences, Ain Shams University, Egypt.
- [128] Said, Shereen, Abdalla Mostafa, Essam H. Houssein, Aboul Ella Hassanien, and Hesham Hefny. "Moth-flame Optimization Based Segmentation for MRI Liver Images." *In International Conference on Advanced Intelligent Systems and Informatics*, pp. 320-330. Springer, Cham, 2017.
- [129] Ahmed, Mohammed M., Essam H. Houssein, Aboul Ella Hassanien, Ayman Taha, and Ehab Hassanien. "Maximizing Lifetime of Wireless Sensor Networks Based on Whale Optimization Algorithm." *In International Conference on Advanced Intelligent Systems and Informatics*, pp. 724-733. Springer, Cham, 2017.
- [130] Hamad, Asmaa, Essam H. Houssein, Aboul Ella Hassanien, and Aly A. Fahmy. "A Hybrid EEG Signals Classification Approach Based on Grey Wolf Optimizer Enhanced SVMs for Epileptic Detection." *In International Conference on Advanced Intelligent Systems and Informatics*, pp. 108-117. Springer, Cham, 2017.
- [131] Ali, M. A., Houssein, E. H., Eldemerdash, N. A., & Hassanien, A. E. (2017). **Increasing the hiding capacity in image steganography using Braille code.** *International Journal of Intelligent Engineering Informatics*, 5(4), 327-341.
- [132] Essam H. Houssein, Aboul Ella Hassanien, Alaa A. K. Ismaeel, "EEG Signals Classification for Epileptic Detection: A review", *2nd International Conference on Internet of Things Data, and Cloud Computing Venue: Churchill College, Cambridge, United Kingdom*, 22-23 March 2017.
- [133] Osama, Sarah, Essam H. Houssein, Aboul Ella Hassanien, and Aly A. Fahmy. "Forecast of wind speed based on whale optimization algorithm." *International Conference on IoT and Machine Learning*, p. 62. ACM, 2017.

2016

- [134] Hamad, A., Houssein, E. H., Hassanien, A. E., & Fahmy, A. A. (2016, December). **Feature extraction of epilepsy EEG using discrete wavelet transform.** *In 12th International Computer Engineering Conference (ICENCO)*, IEEE, pp. 190-195, Dec 2016.
- [135] Houssein, E. H., AbdElminaam, D. S., & Ismaeel, A. A. **Ant-Hoc: A swarm intelligence-based routing protocol for Ad Hoc networks.** *International Journal of Computer Networks and Wireless Communications (IJCNWC)*, ISSN: 2250-3501, Vol.6, No 1, Jan-Feb 2016.
- [136] Houssein, E. H., Ali, M. A., & Hassanien, A. E. (2016, September). **An Image Steganography Algorithm using Haar Discrete Wavelet Transform with Advanced Encryption System.** *In Computer Science and Information Systems (FedCSIS)*, 2016 Federated Conference on (pp. 641-644). IEEE.
- [137] Jassim R. Mlgheit , Essam H. Houssein , Hala H. Zayed , "Efficient Privacy Preserving of Multi-keyword Ranked Search Model over Encrypted Cloud Computing", *ICCAT'2017*, cairo, Egypt, December 29th 2016.
- [138] Khalid M. Abdullah, Essam H. Houssein, Hala H. Zayed , "New Security Protocol using Hybrid Cryptography Algorithm for WSN", *ICCAT'2017*, Cairo, Egypt, December 29th 2016.
- [139] Houssein, Essam H., Moataz Kilany, Aboul Ella Hassanien, and Vaclav Snašel. "A Two-Stage Feature Extraction Approach for ECG Signals." *In International Afro-European Conference for Industrial Advancement*, pp. 299-310. Springer, Cham, 2016.

2015

- [140] Ismaeel, Alaa AK, Ammar Yassir, Tarek Mahmoud, Abdelmegied Aly, and Essam H. Houssein. "Area bounds of hierarchical graphs straightline grid drawing." *In Information Technology and Computer Applications Congress (WCITCA)*, 2015 World Congress on, pp. 1-5. IEEE, 2015.
- [141] Houssein, Essam H., and A. A. Ismaeel. "Ant Colony Optimization based Hybrid Routing Protocol for MANETs." *Journal of Emerging Trends in Computing and Information Sciences* 6, no. 11 (2015).

Before 2014

- [142] T. M. Mahmoud, E. H. Houssein and Alaa A. K. Ismaeel, "New Adaptive Routing Protocol for Mobile Ad hoc Networks", *International Journal of Networking and Communication (IJNC)*, Vol.1, Issue 1, 2014.
- [143] T. M. Mahmoud, E. H. Houssein and Alaa A. K. Ismaeel, "New Hybrid Routing Protocol for MANETs", *International Conference on Network & Wireless Technology and Applications*, Tunisia, ICNWT'2014.
- [144] A. A. A. Radwan, T. M. Mahmoud and E. H. Houssein, "HOPPRP: Hybrid Ant Colony Optimization Proactive Routing Protocol for Mobile Ad hoc Networks", *5th International Conference on Intelligent Computing and Information Systems*, Faculty of Computer & Information Science, Ain Shams University, Egypt, 30 June - 3July, 2011.
- [145] A. A. A. Radwan, T. M. Mahmoud and E. H. Houssein, "AntNet-RSLR: A Proposed Ant Routing Protocol for MANETs", *The first Saudi International Electronics, Communications and Electronics Conference (SIEPC'11)* and IEEE Explore Digital Library, Riyadh, Saudi Arabia, <http://www.kacst-siepc.org>, April 23-26, 2011.
- [146] A. A. A. Radwan, T. M. Mahmoud and E. H. Houssein, "Performance Comparison of AODV, DSR and LAR Routing Protocols for MANETs", *5th International Conference on Intelligent Computing and Information Systems*, Faculty of Computer & Information Science, Ain Shams University, Egypt, 30 June - 3July, 2011.
- [147] A. A. A. Radwan, T. M. Mahmoud and E. H. Houssein, "Evaluation Comparison of Some Ad Hoc Networks Routing Protocols", *El Sevier, Egyptian Informatics Journal (EIJ)*, Volume 12, issue2, July 2011.
- [148] A. A. Radwan, T. M. Mahmoud and E. H. Houssein, "Performance Measurement of Some Mobile Ad Hoc Network Routing Protocols", *International Journal of Computer Science Issues (IJCSI)*, Vol.8, Issue 1, Jan. 2011.
- [149] A. A. A. Radwan and E. H. Houssein, "A new Algorithm for Compact Box-Drawing of Trees", *International Journal of Intelligent Computing & Information Sciences*, Volume 4, Number 2, PP: 21-31, 2004.
- [150] A. A. A. Radwan, M. R. Girgis and E. H. Houssein, "Techniques for Determining the Area Requirement of Visibility Representations of Rooted Trees", *International Journal of Intelligent Computing & Information Sciences*, Volume 2, Number 2, PP: 69-79, 2002b.
- [151] A. A. Radwan, M. R. Girgis and E. H. Houssein, "Comparing Area of Different Visibility Representations of Rooted Trees", *International Journal of Intelligent Computing & Information Sciences*, Volume 2, Number 1, PP: 68-77, 2002a.

C. Editing Books:

- Oliva, Diego, Essam H. Houssein, and Salvador Hinojosa. "Metaheuristics in Machine Learning: Theory and Applications." (Studies in Computational Intelligence 967), Springer.

Thesis Supervision:

PhD		MSc		Total Thesis
Done	Present	Done	Present	
3	4	20	15	42

Training Courses

- ORASCOM Training & Technology (OTT)
- Career Development and Consultation Academy
- CCNA instructor
- Information Storage and Management (ISM), EMC², 2 Feb 2014.
- Cloud Infrastructure and Services (CIS), EMC², 16:20 Feb 2014.
- NAQAAE (National Authority for Quality Assurance and Accreditation of Education)
 - Good practices for institutions of higher education, Active learning and evaluating the learning outcomes

Journal Reviewer

<https://publons.com/researcher/1736026/essam-h-houssein/>

Publishers	Journals
Elsevier	<ol style="list-style-type: none"> 1. Applied Soft Computing 2. Alexandria Engineering Journal 3. Artificial Intelligence in Medicine 4. Computational Design and Engineering 5. Computer Methods and Programs in Biomedicine 6. Computers in Biology and Medicine 7. Expert Systems with Applications 8. Engineering Applications of Artificial Intelligence 9. Engineering Science and Technology 10. Heliyon 11. IRBM 12. Informatics in Medicine Unlocked 13. Journal of Computational Design and Engineering 14. Journal of King Saud University - Computer and Information Sciences 15. Knowledge-Based Systems 16. Measurement 17. Resources, Conservation & Recycling 18. Sustainable Energy Technologies and Assessments 19. Swarm and Evolutionary Computation
Springer	<ol style="list-style-type: none"> 20. Artificial Intelligence Review 21. Applied Intelligence 22. Complex & Intelligent System 23. Evolutionary Intelligence 24. Engineering 25. Evolving Systems 26. ISA Transactions 27. Journal of Ambient Intelligence and Humanized Computing 28. Journal of Medical and Biological Engineering 29. Journal of Combinatorial Optimization 30. Neural Computing and Applications 31. Personal and Ubiquitous Computing 32. Soft Computing 33. Wireless Personal Communications 34. Telecommunication Systems
IEEE	<ol style="list-style-type: none"> 35. IEEE Transactions on Evolutionary Computation 36. IEEE Transactions on Neural Systems and Rehabilitation Engineering 37. IEEE Transactions on Pattern Analysis and Machine Intelligence 38. IEEE Journal of Biomedical and Health Informatics 39. IEEE Transactions on Industrial Informatics 40. IEEE Transactions on Network and Service Management 41. IEEE Access.
CMC	42. Computers, Materials & Continua
Scientific Reports	43. Scientific Reports
PeerJ	44. PeerJ Computer Science
PLOS ONE	45. PLOS ONE
Taylor and Francis	<ol style="list-style-type: none"> 46. Ambient Energy 47. Applied Artificial Intelligence 48. Automatika 49. Computer Methods and Programs in Biomedicine 50. Connection Science 51. Computer Methods in Biomechanics and Biomedical Engineering 52. Engineering Applications of Computational Fluid Mechanics 53. Engineering Optimization 54. Journal of Experimental & Theoretical Artificial Intelligence
Emerald	<ol style="list-style-type: none"> 55. Engineering Computations 56. International Journal of Energy Sector Management
Wiley	<ol style="list-style-type: none"> 57. Concurrency and Computation: Practice and Experience 58. Expert Systems 59. International Journal Imaging Systems and Technology (IMA) 60. Intelligent Systems 61. Transactions on Emerging Telecommunications Technologies
OXFORD	<ol style="list-style-type: none"> 62. Journal of Computational Design and Engineering 63. Clean Energy
MDPI (3 journals)	64. Algorithms, Computation and Remote Sensing
Hindawi (3 journals)	65. Complexity, Mathematical Problems in Engineering and Journal of Control Science and Engineering
Others	<ol style="list-style-type: none"> 66. Energy systems integration, IET 67. Technical Review, IETE 68. Mechatronic Systems and Control ACTA Press 69. Jordanian Journal of Computers and Information Technology (JJCIT) 70. International Journal of Intelligent Engineering Informatics, inderscience 71. International Journal of Advanced Computer Technology – GlobalCIS 72. Bulletin of Electrical Engineering and Informatics

Bio:

Essam H. Houssein received his PhD degree in Computer Science in 2012. He is an associate professor at the Faculty of Computers and Information, Minia University, Egypt. He is the founder and chair of the Computing & Artificial Intelligence Research Group (CAIRG) in Egypt. He has more than 100 scientific research papers published in prestigious international journals in the topics for instance meta-heuristics optimization, artificial intelligence, image processing, IoT and its applications. Essam H. Houssein serves as a reviewer of more than 60 journals (Elsevier, Springer, IEEE, etc.). His research interests include WSNs, IoT, AI, Bioinformatics and Biomedical, Image processing, Data mining, and Meta-heuristics Optimization techniques.

Important accounts

<https://scholar.google.com/citations?user=UScKJW4AAAAJ&hl=en>

https://www.researchgate.net/profile/Essam_Houssein

<http://staffportal.minia.edu.eg/essam.halim/>

<https://publons.com/researcher/1736026/essam-h-houssein/>

<https://sciprofiles.com/profile/EssamHoussein>

Orcid : <https://orcid.org/0000-0002-8127-7233>

Scopus Author ID: 43361385400

Loop profile: 386237

ResearcherID: C-8941-2016

Regards,

Dr. Essam Halim Houssein,

Associate Professor of Computer Science,

Vice Dean for Postgraduate Studies and Research Affairs,

Faculty of Computers & Information,

Minia University, El-Minia Governorate, 61519, Egypt.

Chair of Computing & Artificial Intelligence Research Group (CAIRG)

<https://www.facebook.com/groups/CAIRG/>

<http://staffportal.minia.edu.eg/essam.halim/>