Curriculum Vitae

MAHMOUD OWAIS

Associate Professor at Civil Department College of Engineering Assiut University, Egypt | maowais@aun.edu.eg, Tel: +201003367388

Status:

Full Name : Mahmoud Mohamed Ahmed Owais

Profession : Associate Professor

Nationality : Egyptian, U.S. permanent residency under process via approved EB/2

Date of Birth : 1st October, 1987 Mobile : +201003367388 College Fax : 022 088 2332553

E-Mail : Maowais@aun.edu.eg; Mahdmohd@eng.au.edu.eg; Maowais@yahoo.com

Biographical Sketch

Mahmoud Owais is an associate professor of transportation planning and traffic engineering in the Civil Engineering Department, Faculty of Engineering, Assiut University. He was born on 1/10/1987, El-Mansoura, Egypt. He graduated from Assiut University - Faculty of Engineering in 2009. He obtained his M.S. in Transportation Planning from the University of Assiut in 2011. He undertook his Ph.D. in Transit Planning at the same university in 2014. He published more than 40 studies and conducted more than 400 reviews in well-reputed journals such as; IEEE Transaction on ITS, Transportation Research Part B, and the European Journal of Operational Research regarding transit planning and traffic sensor problems. He believes that public transportation is a vital means of reducing traffic problems. Therefore, He takes his major in public transportation planning. He developed new algorithms to solve several issues relating to transit network design problem. He also expanded his work to incorporate Artificial Intelligence and Machine Learning in traffic flow prediction, pavement materials analysis, and accident analysis. He produced seamless studies regarding traffic injury severity analysis in collaboration with the Highway Safety Information System (HSIS) in the U.S. He gained academic and practical experience during his work years.

Credentials U.S. Degree Equivalency Evidence

https://badges.wes.org/Evidence?i=e62d9d7d-f8f0-44f0-9b89-4b09274e6b50&type=us

Academic Posts

Institution	Title	Period	FT/PT
Faculty of Engineering, Assiut Univ., Egypt	Associate Professor	2020 - until now	FT

College of Engineering, Sphinx Univ., New Assiut, Egyp	Associate Professor	2022 - until now	PT/on leave
College of Engineering – Majmaah Univ., KSA	Assistant Professor	2017–2022	FT/on leave
Faculty of Engineering, Assiut Univ., Egypt	Assistant Professor	2014 - 2020	FT
Faculty of Engineering, Assiut Univ., Egypt	Assistant lecturer	2011-2014	FT
Faculty of Engineering, Assiut Univ., Egypt	Demonstrator	2009-2011	FT

Main Research Interest areas

Public Transportation - Transportation data modeling and simulation - Traffic Accidents analysis - Artificial Intelligence & Machine Learning in material properties analysis - Statistics and theory of probability - Combinatorial Optimization - Heuristics and Metaheuristics - Traffic Engineering Operation Management & Control - Pavement Design and Traffic Micro-Simulation.

Language and Computer Skills

- Professional at English academic usage, teaching in an ABET-accredited college for over five years.
- Expert in Traffic simulation software.
- Expert in MATLAB and Python programming languages.

Publications in Refereed Journals Starting from 2011

Contribution statement for all articles:

Dr. Mahmoud Owais: Conceptualization, methodology, software, validation, writing - Original draft.

- <u>Owais, M.</u> (2024). Deep Learning for Integrated Origin—Destination Estimation and Traffic Sensor Location Problems. *IEEE Transactions on Intelligent Transportation Systems*, Early Access. https://doi.org/10.1109/TITS.2023.3344533
- <u>Owais, M.</u>, Alshehri, A., Gyani, J., Aljarbou, M. H., & Alsulamy, S. (2024). Prioritizing Rear-End Crash Explanatory Factors for Injury Severity Level Using Deep Learning and Global Sensitivity Analysis. *Expert Systems with Applications*, 245, 123114. https://doi.org/10.1016/j.eswa.2023.123114
- <u>Owais, M.</u>, & Moussa, G. S. (2024). Global sensitivity analysis for studying hot-mix asphalt dynamic modulus parameters. *Construction and Building Materials*, 413, 134775. https://doi.org/10.1016/j.conbuildmat.2023.134775

- <u>Owais, M.</u>; (2024). Analyzing Witczak 1-37A, Witczak 1-40D and Modified Hirsch Models for Asphalt Dynamic Modulus Prediction Using Global Sensitivity Analysis. *International Journal of Pavement Engineering*, 24 (1), 2268808. https://doi.org/10.1080/10298436.2023.2268808
- Almutairi, A., Yi, P., & <u>Owais, M.</u> (2024). New Approach for Estimating Intersection Control Delay from Passive Traffic Sensors at Network Level. *IEEE Access*, 12. P. 2882 2900. https://doi.org/10.1109/ACCESS.2024.3349499
- Almutairi, A., Yi, P., & *Owais, M.* (2024). "Notes on Bus User Assignment Problem Using Section Network Representation Method." *Applied Sciences* 14.8: 3406. https://doi.org/10.3390/app14083406
- Idriss, K. L.; <u>Owais, M.</u>, (2023). Global sensitivity analysis for seismic performance of shear wall with high-strength steel bars and recycled aggregate concrete. Construction and Building Materials, 411, 134498.

 https://doi.org/10.1016/j.conbuildmat.2023.134498
- Alshehri, A.; <u>Owais, M.</u>; Gyani, J.; Aljarbou, M.H.; Alsulamy, S. (2023). Residual Neural Networks for Origin–Destination Trip Matrix Estimation from Traffic Sensor Information. Sustainability, 15, 9881. https://doi.org/10.3390/su15139881
- Owais, M., & Ahmed I. Shahin (2022). Exact and Heuristics Algorithms for Screen Line Problem in Large Size Networks: Shortest Path-Based Column Generation Approach, IEEE Transactions on Intelligent Transportation Systems, In press. https://doi.org/10.1109/TITS.2022.3189770.
- <u>Owais, M.</u> (2022). Traffic Sensor Location Problem: Three Decades of Research, Journal of Expert Systems with Applications. *Expert Systems with Applications, In Press.* https://doi.org/10.1016/j.eswa.2022.118134.
- <u>Owais, M.</u>, & Ahmed, A. S. (2022). Frequency Based Transit Assignment Models: Graph Formulation Study. *IEEE Access*, vol. 10, pp. 62991-63003, https://doi.org/10.1109/ACCESS.2022.3182046.
- Moussa, G. S., <u>Owais, M.</u>, & Dabbour, E. (2022). Variance-based global sensitivity analysis for rear-end crash investigation using deep learning. <u>Accident Analysis & Prevention</u>, 165, 106514. https://doi.org/10.1016/j.aap.2021.106514.
- **Owais, M.,** & Matouk, A. E. (2021). A factorization scheme for observability analysis in transportation networks. **Expert Systems with Applications**, 174, 114727. https://doi.org/10.1016/j.eswa.2021.114727.
- <u>Owais, M.</u>, Ahmed, A. S., Moussa, G. S., & Khalil, A. A. (2021). Integrating underground line design with existing public transportation systems to increase transit network connectivity: case study in greater cairo. *Expert Systems with Applications*, 167, 114183. https://doi.org/10.1016/j.eswa.2020.114183
- Moussa, G. S., & <u>Owais, M.</u> (2021). Modeling Hot-Mix asphalt dynamic modulus using deep residual neural Networks: Parametric and sensitivity analysis study. <u>Construction</u> and <u>Building Materials</u>, 294, 123589. https://doi.org/10.1016/j.conbuildmat.2021.123589

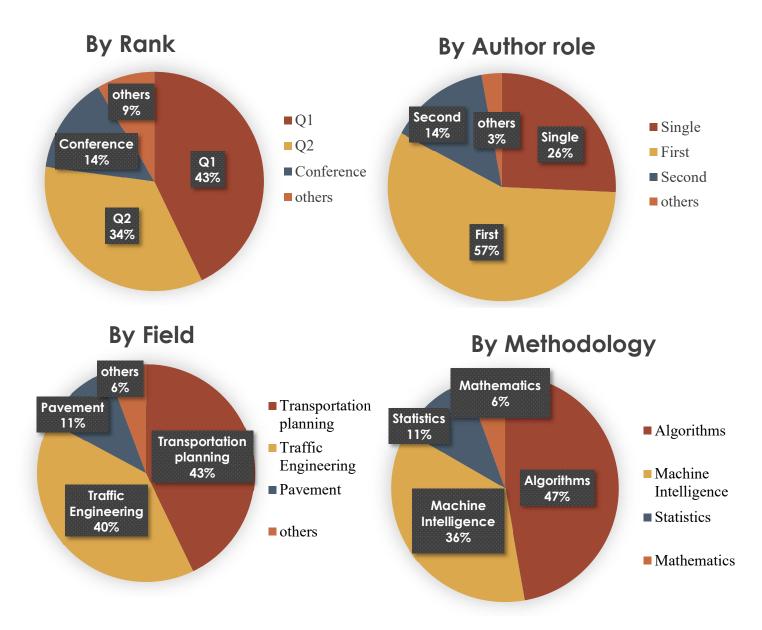
- <u>Owais, M.</u>, & Alshehri, A. (2020). Pareto optimal path generation algorithm in stochastic transportation networks. *IEEE Access*, 8, 58970-58981. https://doi.org/10.1109/ACCESS.2020.2983047
- <u>Owais, M.</u>, Moussa, G. S., & Hussain, K. F. (2020). Robust deep learning architecture for traffic flow estimation from a subset of link sensors. *Journal of Transportation Engineering, Part A: Systems*, 146(1), 04019055. https://doi.org/10.1061/JTEPBS.0000290
- Moussa, G. S., & <u>Owais, M.</u> (2020). Pre-trained deep learning for hot-mix asphalt dynamic modulus prediction with laboratory effort reduction. *Construction and Building Materials*, 265, 120239. https://doi.org/10.1016/j.conbuildmat.2020.120239
- <u>Owais, M.</u>, Ahmed, A. S., Moussa, G. S., & Khalil, A. A. (2020). An optimal metro design for transit networks in existing square cities based on non-demand criterion. <u>Sustainability</u>, 12(22), 9566. https://doi.org/10.3390/su12229566
- <u>Owais, M.</u>, Abulwafa, O., & Abbas, Y. A. (2020). When to decide to convert a roundabout to a signalized intersection: simulation approach for case studies in Jeddah and Al-Madinah. *Arabian Journal for Science and Engineering*, 45(10), 7897-7914. https://doi.org/10.1007/s13369-020-04479-6
- <u>Owais, M.,</u> & Abbas, Y. A. (2020). Distributing portable excess speed detectors in AL riyadh city. <u>International Journal of Civil Engineering</u>, 18(11), 1301-1314. https://doi.org/10.1007/s40999-020-00537-0
- **Owais, M.,** Ahmed, A. S., Moussa, G. S., & Khalil, A. A. (2021). Design scheme of multiple-subway lines for minimizing passengers transfers in mega-cities transit networks. **International Journal of Rail Transportation**, 9(6), 540-563. https://doi.org/10.1080/23248378.2020.1846632
- <u>Owais, M.</u> (2019). Location strategy for traffic emission remote sensing monitors to capture the violated emissions. <u>Journal of Advanced Transportation</u>, 2019. https://doi.org/10.1155/2019/6520818
- <u>Owais, M.</u>, Moussa, G. S., & Hussain, K. F. (2019). Sensor location model for O/D estimation: Multi-criteria meta-heuristics approach. *Operations Research Perspectives*, 6, 100100. https://doi.org/10.1016/j.orp.2019.100100
- Owais, M., & Osman, M. K. (2018). Complete hierarchical multi-objective genetic algorithm for transit network design problem. Expert Systems with Applications, 114, 143-154. https://doi.org/10.1016/j.eswa.2018.07.033
- **Owais, M.,** & Hassan, T. (2018). Incorporating dynamic bus stop simulation into static transit assignment models. **International Journal of Civil Engineering**, 16(1), 67-77. http://dx.doi.org/10.1007/s40999-016-0064-8
- <u>Owais, M.,</u> Osman, M. K., & Moussa, G. (2015). Multi-objective transit route network design as set covering problem. *IEEE Transactions on Intelligent Transportation Systems*, 17(3), 670-679. https://doi.org/10.1109/TITS.2015.2480885
- <u>Owais, M.</u> (2015). Issues related to transit network design problem. *International Journal of Computer Applications*, 975, 8887. http://dx.doi.org/10.5120/21250-4073

- <u>Owais, M.</u> (2015). Investigating Optimal Bus Routes. Planning and Operation in Urban Areas. GRIN Verlag. E-Book.2015, ISNB: 978-3-656-91344-3. http://dx.doi.org/10.13140/RG.2.1.2835.6643
- <u>Owais, M.,</u> Moussa, G., Abbas, Y., & El-Shabrawy, M. (2014). Simple and effective solution methodology for transit network design problem. *International Journal of Computer Applications*, 89(14), 32-40.. <u>http://dx.doi.org/10.5120/15702-4681</u>
- <u>Owais, M.</u> M., Moussa, G., Abbas, Y., & El-Shabrawy, M. (2013). Optimal frequency setting for circular bus routes in urban areas. *JES. Journal of Engineering Sciences*, 41(5), 1796-1811. http://dx.doi.org/10.21608/JESAUN.2013.114910
- <u>Owais, M.</u> M., Moussa, G. S., Abbas, Y. A., & El-Shabrawy, M. (2013). OPTIMAL CIRCULAR BUS ROUTES PLANNING FOR TRANSIT NETWORK DESIGN PROBLEM IN URBAN AREAS. *JES. Journal of Engineering Sciences*, 41(4), 1447-1466. http://dx.doi.org/10.21608/JESAUN.2013.114867
- <u>Owais, M.</u>, Moussa, G. S., Enieb, M., & Abbas, Y. A. (2011). Evaluation and analysis of urban passengers transport modes operation performance & efficiency. *JES. Journal of Engineering Sciences*, 39(2), 283-299. http://dx.doi.org/10.21608/JESAUN.2010.112515

Conference Articles:

- <u>Owais, M.</u> (2022), Synchronizing Al Mashaaer Train Departure Times with Pilgrims Arrival to Minimize the Expected Waiting Times, The Fifth International Conference on Railway Technology: Research, Development and Maintenance, France Elsevier.
- <u>Owais, M.</u>, Moussa, G. S. (2022), "Toward Mobility as a Service in Large Cities", 1st INTERNATIONAL ENGINEERING CONFERENCE ON RESEARCH AND INNO-VATION, Delta University for Science and Technology, Egypt.
- <u>Owais, M.</u> (2022), Toward Intelligent Transportation System in Mecca Area, 21th Scientific Forum of Hajj, Umrah and Madinah Visit Research Scientific Bulletin (1443H 2022).
- <u>Owais, M.</u> (2015), Transit Network Design Problem Issues and Problems, International Conference on Transportation and Highway Engineering, Rome, Italy.
- **Owais, M.** (2014), A Novel Solution Methodology for Transit Route Network Design Problem, International Conference on Transportation and Highway Engineering, Spain.
- **Owais, M.** (2013), Optimal Circular Bus Routes Planning for Transit Network Design Problem in Urban Areas". International Conference in Prospects of Engineering Solutions and Challenges of the Times 2013, Fayoum University, Egypt: presenting

Research Statistics:



Conferences Keynote Speaker

- Invited as a Keynote Speaker for the event of Nation al Seminar held by the Civil Engineering Master Program, Faculty of Engineering ULM "The 2nd International Symposium on Civil Engineering and Environmental Research (ISCEER)", (2022).

Received Grants and Funding

- International Grant (2024): Received from the Deputyship for Research & Innovation, Ministry of Education, Saudi Arabia, Project No. IFP-2022-30, totaling

550,000 rivals for research on deep learning applications in traffic demand prediction.

- International Grant (2024): Awarded by the Deanship of Scientific Research at Majmaah University, Project No. R-2024-1046, amounting to 100,000 riyals for developing a model for public passenger choices in transit networks.
- **International Grant (2023)**: Granted by the Deanship of Scientific Research at Majmaah University, Project No. R-2023-914, with a budget of 100,000 riyals to model control delay from passive traffic sensors at the network level.
- **Internal Grant (2021)**: Received from the Deanship of Scientific Research at Majmaah University, Project No. R. 1441-73, totaling 50,000 riyals to develop an approach for deciding when to convert a roundabout to a signalized intersection.
- Internal Grant (2020): Awarded by the Deanship of Scientific Research at Majmaah University, Project No. 1440-14, amounting to 50,000 riyals to improve data monitoring in Saudi Arabia.
- **Internal Grant (2019)**: Granted by the Deanship of Scientific Research at Majmaah University, Project No. 1439-53, with a budget of 50,000 riyals to study the conversion to intelligent transportation systems in the Makkah area.

Completed Supervision

Doctorate degrees:

- Criteria for Integrating Surface and Underground Metro Passenger Transit Systems in Big Cities, awarded 2020.

Master's degrees:

- Issues and challenges Related to signal timing of Intersections at Congested Transportation networks, awarded 2020.
- New Trends in Transportation Data: Acquisition Tools Filtering Techniques and Analysis Methods, awarded 2020.

Senior Design projects:

- Evaluation and design of Roundabouts at Jalagel, Majmaah, KSA, awarded 2017.
- Unconventional Design of Tamir Road Intersections, KSA, awarded 2018.

- Determining the Best Location Structure for Traffic Sensors in Majmaah City, awarded 2019.
- Evaluation and Redesign of Etisalat Roundabout, Majmaah, KSA, awarded 2020.
- Design A Transit Route Network in KSA Cities, awarded 2021.

Academic Experience Record

Assiut University, Egypt:

- Taught undergraduate courses: Transportation Planning, Traffic Engineering, Highways Engineering, Computer Applications in Civil Engineering, and Surveying I & II.
- Taught postgraduate courses: Advanced Transportation Planning, Computer Applications in Transportation, Intelligent Transportation Systems, and Engineering Statistics.
- Served as a Lecturer at the Education Development Center, Faculty of Engineering.

Majmaah University, Kingdom of Saudi Arabia:

- Taught undergraduate courses: Urban Transportation Planning, Highways and Traffic Engineering, and Railways Engineering.
- Contributed to writing the Self Study Report (SSR) for College of Engineering accreditation by the National Center for Academic Accreditation and Evaluation (NCAAA) in 2020.
- Played a key role in attaining ABET accreditation for the College of Engineering in 2017.
- Assisted in developing the study plan for the College of Engineering.
- Prepared the proposal for Transportation Master's Degree courses.

Sphinx University, New Assiut, Egypt:

• Taught undergraduate courses: Calculus, Linear Algebra, Differential Equations, Statistics, and Operational Research.

"In collaboration with Dr. Owais affiliations at these universities, he successfully published numerous articles in internationally recognized journals, ranking in **the first and second quartiles of top ISI journals.**"

Journals Peer Review Contribution

Due to his knowledge and expertise in transportation planning and highway engineering, Dr. Owais has been regularly invited to conduct peer reviews for elite journals in the field, including:

- Transportation Research Part B, Elsevier
- Transactions on Intelligent Transportation Systems Journal, *IEEE*.
- European Journal of Operational Research, Elsevier.
- Transportation Journal, Springer.
- Journal of Transportation Engineering, Part A: Systems, at ASCE.
- Transportation Research Board (TRB) annual meeting.
- Expert Systems with Applications, Elsevier.
- IEEE Access Journal.
- International Journal of Transportation Science and Technology, Elsevier.
- International Journal of Civil Engineering, Springer.
- Concurrency and Computation: Practice and Experience, Wiley.
- Archives of Computational Methods in Engineering, Springer.
- Arabian Journal for Science and Engineering, Springer.
- Discrete Dynamics in Nature and Society.
- Plos One, Elsevier.

"Dr. Owais has completed **more than 400 authenticated Web of Science peer reviews** to date."

Funded Projects Review Contribution

- National Science and Technology Development Fund organization (STDF).
- Taibah University Scientific Dean for Research and Development.
- University of Hail Scientific Dean for R & D.

"Dr. Owais has completed more than 25 funded project reviews to date."

Practical Experience Activities

Traffic and Infrastructure Projects in Egypt:

Member, Engineering Consultant Centre, Faculty of Engineering, Assiut University (1/1/2015 – until now)

- Supervised primary delivery of new government-constructed roads in Assiut City.
- Reviewed laboratory tests of road construction materials to ensure conformity with Egyptian specifications.
- Designed flexible pavement mixes for various road construction projects.
- Participated in traffic inventory and monitoring on main arteries in Assiut, analyzing data from various monitoring points.
- Reviewed performance of traffic light signals at major intersections and assessed traffic flow in Majmaah City.
- Provided traffic operational recommendations to Assiut governorate authorities.

Engineering Consultant Roles in Saudi Arabia:

- Collaborated with Jalajil Municipality in revising and redesigning city roundabouts.
- Worked with Tamir Municipality to revise intersection designs.
- Proposed innovative design solutions for intersections in Majmaah City.
- Supervised new and under-construction roads, ensuring foundation layers met specifications and overseeing sample collection procedures.
- Led committees for initial approval of newly opened roads and final approval after one year.

Research Significance

Dr. Owais's citation record, with over <u>800 citations</u> to date, an <u>h-index of 18</u>, and an <u>i-index of 23</u>, highlights his significant influence on the field of engineering. His research has profoundly impacted topics such as solving transit network design problems, optimizing traffic estimation results, and achieving dynamic traffic assignment. At least <u>23 of Dr. Owais's papers</u> are among the most highly cited in engineering for their years of publication. Notably, he has authored <u>at least 15 papers</u> ranking in the <u>top 1.00%</u>, and <u>8 papers</u> in the <u>top 5.00%</u> of most-cited articles in the field for their respective years.

Illustrative examples of how Dr. Owais's research has directly benefited the field include:

- Transportation Research Part C: Emerging Technologies: M. Salari et al. extended Dr. Owais's algorithm for locating traffic sensors by addressing the time-dependent sensor failure effect while considering the sensor lifetime benefiting from the concepts presented initially by Dr. Owais.
- **IEEE Transactions on Intelligent Transportation Systems**: Nayeem et al. utilized Dr. Owais's multi-objective approach to tackle the transit network design problem, recognizing his method as a powerful solution.
- Transportation Research Part C: Emerging Technologies: Fu et al. compared their methodology for optimizing traffic count locations to Dr. Owais's, establishing his research as a benchmark in traffic information studies.
- Swarm and Evolutionary Computation: Islam et al. relied on Dr. Owais's two-stage approach for solving the transit network design problem, validating their heuristic-aided stochastic beam search algorithm.
- Transportation Journal: Bourbonnais et al. developed a novel solution for the transit network design problem using Dr. Owais's method, confirming its utility for the scientific community.
- IEEE Transactions on Intelligent Transportation Systems: Wang et al. cited Dr. Owais's routing techniques for quiet route planning for pedestrians, showcasing his cutting-edge research in transit planning.
- Expert Systems with Applications: Liang et al. emphasized the capabilities of Dr. Owais's design algorithm for urban transit networks, confirming the high caliber of his research.
- European Journal of Operational Research: Duran-Micco et al. highlighted Dr. Owais's algorithm for its excellent performance in considering emissions in transit network designs.
- Journal of Advanced Transportation: Sánchez-Cambronero et al. used Dr. Owais's findings to develop a model for locating plate-recognition devices and estimating their impact on traffic estimation results.
- **IEEE Access**: Pan et al. based their distributed assignment method for dynamic traffic assignment on Dr. Owais's approach, affirming his research as a benchmark for innovation in the field.

"Dr. Owais's work is widely recognized for its originality and significance, making substantial contributions to engineering and serving as a vital resource for other researchers."

Awards and Acknowledgements

- King Saud University Tarq Alqasbi Award (2022): Received for research excellence in the transportation sector at the national level in the Kingdom of Saudi Arabia.
- Assiut University (2015): Awarded for research excellence for the best-published research, titled "Multi-objective transit route network design as set covering problem," published in IEEE Transactions on Intelligent Transportation Systems.

• ABET Accreditation Contribution:

- o Certificate of Appreciation for participation in acquiring ABET accreditation for the College of Engineering at Majmaah University, at the departmental level.
- Certificate of Appreciation for participation in acquiring ABET accreditation for the College of Engineering at Majmaah University, at the college level.

Journal Review Contributions:

- Certificate of Appreciation from IEEE Transactions on Intelligent Transportation Systems for valuable participation in the journal review process.
- Certificate of Appreciation from IEEE Access for valuable participation in the journal review process.
- o Certificate of Appreciation from Springer Journals Manager for valuable participation in the review process of one of its journals.

Leadership Roles

- Chair, Engineering Practice Committee, Civil Engineering Department, Faculty of Engineering, Assiut University, Egypt (2015- until now).
- Chair, Electronic Learning Committee, College of Engineering, Majmaah University, Kingdom of Saudi Arabia (2017-2022).
- Chair, Engineering Practice Committee, College of Engineering, Majmaah University, Kingdom of Saudi Arabia (2017-2022).
- Chair, Student Activities Committee, College of Engineering, Majmaah University, Kingdom of Saudi Arabia (2017-2022).
- Chair, Community Services Committee, College of Engineering, Majmaah University, Kingdom of Saudi Arabia (2018-2022).

Training workshops

Lectures Delivered:

- 1. Introduction to Theory of Probability and Statistics for Young Researchers Civil Engineering Department, Assiut University, 2016.
- 2. How to Create an Efficient Online Question Bank Civil Engineering Department, Majmaah University, 2018.
- 3. How to Prepare a Competitive Funding Research Project Proposal Majmaah University, 2020.
- 4. Global Sensitivity Analysis as a Premise Research Tool Civil Engineering Department, Majmaah University, 2021.
- 5. Mastering the Art of Publishing in High-quality Scientific Journals: Essential Tips and Best Practices
 Faculty of Engineering, Assiut University, 2023.

Professional Development and Workshops Attended:

- 1. MATLAB & Simulink MENA Academic Forum 2022 Topics:
 - o MATLAB in the Loop: A Mechatronics Approach (Prof. Jaradat, AUS)
 - o Solving Engineering Problems Using MATLAB (Dr. Naseer, NUST)
 - Improving Human Life by Human-Centered Robotics Research (Prof. Awad, KU)
 - MATLAB Grader Activities in Moodle (Prof. Aylaj, UH2C)
- 2. **IEEE Authorship and Open Access Symposium 2022**Tips and Best Practices to Get Published from IEEE Editors.
- 3. Critical Thinking 2021.
- 4. Advanced E-learning 2020.
- 5. Organizing Scientific Conferences 2018.
- 6. Leading Research Groups 2018.
- 7. Statistical Analysis in Scientific Research 2017.
- 8. Credit Hours Paradigm 2016.
- 9. Scientific Research Ethics 2015.
- 10. Quality Criteria for the Teaching Process 2014.

11. Time and Meeting Management - 2013.

Dr. Mahmoud Owais, Associate Professor

Civil Department, Assiut University, Faculty of Engineering

Official website: https://www.aun.edu.eg/engineering/mahmoud-mohamed-ahmed-owais Google Scholar: http://scholar.google.com.eg/citations?user=UNwlx2MAAAAJ&hl=en

ResearchGate: https://www.researchgate.net/profile/Mahmoud Owais

Web of Science Researcher ID: https://www.webofscience.com/wos/author/record/U-2480-2019

ORCID: http://orcid.org/0000-0002-1639-2120

Scopus Author ID: 56893357000

Email: Maowais@aun.edu.eg; Maowais@yahoo.com