Dr. Bara' Wasfi Al-Mistarehi; Ph.D.

PERSONAL DATA

Name: Bara' Wasfi Al-Mistarehi Date of Birth: January 26, 1984.

Nationality: Jordanian.

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Research Gate Link:

https://www.researchgate.net/profile/Bara-Al-Mestarehi

Google Scholar Link:

https://scholar.google.com/citations?user=198xMe4AAAJ&hl=ar

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EDUCATION

Ph.D.: Civil Engineering, Geomatics, Surveying and Transportation Engineering, University of Stuttgart, Stuttgart, Germany. March. 18, 2016.

M.Sc.: Civil Engineering, Geomatics, Surveying Engineering, University of Stuttgart, Stuttgart, Germany. January, 2013.

M.Sc.: Civil Engineering, Transportation Engineering, Jordan University of Science and Technology (JUST), Irbid, Jordan, Augest. 2009.

B.Sc.: Civil Engineering, Transportation Engineering, Jordan University of Science and Technology (JUST), Irbid, Jordan, Sept. 2007.

General Secondary Certificate – c, 2002, Irbid, Jordan.

THESES

Ph.D. Thesis: "An Approach for Automated Detection and Classification for Pavement Cracks ", published, http://dx.doi.org/10.18419/opus-9161, Stuttgart University, 2016. Supervised by Prof. Dr. Volker Schwieger, the President of Institute of Engineering Geodesy (IIGS).

M.Sc. Thesis: "Image Processing for Detection Distresses", unpublished, Signatur: S7-2013,3-2., Stuttgart University, 2013. Supervised by Prof. Dr. Volker Schwieger, the President of Institute of Engineering Geodesy (IIGS).

Master Thesis: "Integration between Geographical Information System and Paver System to award efficient pavement maintenance management system ", VDM Verlag Dr. Müller GmbH & Co. KG publishing house Itd, Saarbrücken, 2011, ISBN: 978-3-639-36562-7, Germany, Printed USA 2011, available @ www.amazon.com. Supervised by Prof. Dr. Mohammed T. Obaidat, the former Minister of Public Works and Housing - Jordan (December -2009 till 1-2-2011)

RELATED COURSE WORK

Ph.D. Courses:

- 1. Geodesy in civil engineering
- 2. Photogrammetric Systems
- 3. Geometric analysis and interpretation of image data
- 4. Remote sensing: Research activities and projects
- 5. Geoinformatics and GIS
- 6. Kinematic Measurement, Monitoring and Terrestrial Multisensor Systems
- 7. Research methodology
- 8. Scientific information management
- 9. Technical writing for publication
- 10. Spoken Technical communication
- 11. Mathematic for PhD students

M.Sc. Courses:

- 1. Highway Materials
- 2. Analytical Techniques in Transportation
- 3. Traffic Flow Theory and Control
- 4. Advanced Pavement Analysis and Design
- 5. Analytical and Digital Photogrammetry
- 6. Advanced Transportation Planning
- 7. Pavement Management Systems
- 8. Highway Safety
- 9. Transportation Network and Simulation
- 10. Applications of Advanced Technologies in Transportation Engineering
- 11. Special Topics in Transportation Engineering

WORK HISTORY

- 1. Assistant Professor, Department of Civil Engineering, Jordan University of Science & Technology (JUST), Irbid, JORDAN. 2016-present.
- 2. Teaching and Research Assistant, Institute of Engineering geodesy (IIGS), University of Stuttgart, Stuttgart, GERMANY, from October 2013 till March 2016.
- 3. Working with Lehmann and Partner GmbH Company, Schwerborner Straße 99086 Erfurt, Germany, from 2013 till 2016.

- 4. Working with 3D Mapping Solutions GmbH, Raiffeisenstrasse 16 83607 Holzkirchen, Germany from 2013 till 2016.
- 5. Working with institute of Fraunhofer (IPM); Freiburg, Germany, from 2014 till 2016
- 6. Teaching and Research Assistant, Department of Civil Engineering, Jordan University of Science & Technology (JUST), Irbid, JORDAN, from October 2007 till September 2009.

RESEARCH INTERESTS

- Surveying Issues and Geomatics applications in Transportation Engineering.
- Digital Imaging Processing, Photogrammetry, terrestrial and mobile laser scanning, using high spatial resolution imagery, multispectral drones for transportation applications, Radar and LiDAR data, applications of laser scan point clouds and digital terrain analysis using satellite data.
- Geoinformatics, geospatial and statistical analysis, multi-sensor remote sensing data acquisition, archiving, processing, modelling, implementation of GIS/RS tools, implement tools for remote sensing analysis, land use land cover mapping and related accuracy assessment time-series analysis,
- Maps production using Remote Sensing Approaches, Spatial Analysis and Geospatial Data Science with Python, Interactive Geospatial Data visualization, and GIS-based data acquisition.
- Automated Acquisition Mobile Mapping System for Pavement Evaluation, Automated Detection and Classification Techniques for Road Pavement Distresses Using Laser scanner and Deep Machine learning
- Cellular localization.

RESEARCH GRANTS AND FUNDED PROJECTS

- 1. Grant (Scientific Research Support), "Effect of Using Nano Clay and Nano Zinc Oxide Modifiers on Asphalt Binder Rheology ", Deanship of Scientific Research at Jordan University of Science and Technology (JUST)(Grant No.74-2018).
- 2. Grant (Scientific Research Support), "Rutting Performance of Superpave Asphalt Mixtures Designed using Bailey Gradation Method.", Deanship of Scientific Research at Jordan University of Science and Technology (JUST) (Grant No.605-2018).
- 3. GRANT (Partner AGREEMENT 617730-EPP-1-2020-1-EL-EPPKA2-CBHE-JP); "Title of action: EaRth Observation Tools for the promotion of DigITal Economy –ERODITE"; Funded by the Erasmus⁺ Programme of the European Union; duration of the project from 1 January 2019 Until 1 January 2024.

PROFESSIONAL AND SCIENTIFIC MEETINGS

- Participate in Workshop about Returning Experts (Sustainable development through effective knowledge sharing: Concepts, Methods and Processes); it is organized by Deutsche Gesellschaft Fur Internationale Zusammenarbeit (GIZ) GmbH, Center for International Migration and Development (CIM0, it was held on (20-21)-Februrary-2017 of Dead sea, Jordan.
- Participate in Round Table Discussion with GIZ Jordan Environment & Climate Programme, Mr. Axel Ulmer - Head of Environment and Climate Portfolio, Eng. Dina Kurdieh, - Project Officer, it was held on Queen Rania Center of Jordan University of Science and Technology (JUST) on 8-03-2017.
- Participate as a speaker in UK-Jordan links funded workshop titled: Coping with Climate Change and Water Scarcity in Jordan for Sustainable Growth: Vulnerability, Adaptation and Mitigation Measures: HydJo. Partner Universities: University of Wolverhampton (UK) and Jordan University of Science and Technology (Jordan); Dates and venue: 1-3 November 2021, Jordan University of Science and Technology, Irbid, Jordan.
- Participate as a speaker in Geomatics Day; Funded by EaRth Observation Tools for the promotion of DigITal Economy –ERODITE Project; Supported by the Erasmus+ Programme of the European Union, it was held on Jadara University (Jordan) on 4-12-2022.
- Participate in Closing event for PMD with GIZ under the topic of Feminist Development Policy on the 18th of June, 2023, it was held at the Ritz Carlton Hotel in Amman

PUBLICATIONS

A. Published in refereed, specialized, international, and indexed journals after PhD:

- 1. Mohmmed T. Obaidat; Khaled A. Ghuzlan; <u>Bara' Al-Mistarehi</u> (2018): "Integration of Geographic Information Systems (GIS) and PAVER System Toward Efficient Pavement Maintenance Management System (PMMS)". Acceptance letter for publication the Jordan Journal of Civil Engineering, (Vol. 12, No. 3, 2018- that appeared on July. 1, 2018).
- 2. <u>Bara' Al-Mistarehi</u>, Mohammed T. Obaidat (2019): "Creating a Complete Model of the Wooden Pattern from Laser Scanner Point Clouds Using Alpha Shapes", has been accepted for publication in the Jordan Journal of Civil Engineering, (Vol. 13, No. 2, 2019- that appeared online on April. 1, 2019).
- 3. <u>BARA' W. Al-Mistarehi</u>; Taisir Khedaywi; Yassmen T. Obaidat (2019):" Characterization of Asphalt Binder Modified with Polystyrene using Superpave Specification". International Journal of Civil Engineering & Technology (IJCIET), Volume 10, Issue 07, July 2019, pp. 76-89, ISSN Print: 0976-6308 and ISSN

- Online: 0976-6316; Journal Impact Factor (2019): 10.7810 Calculated by GISI (www.jifactor.com)".
- 4. **BARA' W. Al-Mistarehi**; Taisir Khedaywi (2019):" Analysis of Laboratory Techniques for Simulating the Effect of Segregation on Rutting Performance of Asphalt Concrete Mixture ". International Journal of Engineering & Technology (IJET), Volume 11, Issue 04, August 2019, pp. 863-845, e-ISSN: 0975-4024, p-ISSN: 2319-8613.
- 5. <u>Bara' Al-Mistarehi</u>, Mohammed T. Obaidat (2020): "Detection of Crack on Concrete Surface Using Semi-Automated Digital Image Processing Technique", has been accepted for publication in International Journal of Advance Science and Technology (IJAST) in the coming Vol. 29, No. 4s, (2020).
- 6. Khalid A.Ghuzlan; **BARA' W. Al-Mistarehi**; Ahmad S. Al-Momani (2020):" Rutting performance of asphalt mixtures with gradations designed using Bailey and conventional Superpave methods ". Construction and Building Material Journal, Accepted 10 June 2020, 261 (2020) 119941, https://doi.org/10.1016/j.conbuildmat.2020.119941.
- 7. <u>BARA' W. Al-Mistarehi</u>; Ahmad H. Alomari; Mohamad S. Al Zoubi (2021):" Investigation of Saturation Flow Rate Using Video Camera at Signalized Intersection in Jordan ". Received May 10, 2020; accepted Nov 01, 2020; Available online Open Eng, De Gruyter 2021 DOI: https://doi.org/10.1515/eng-2021-0021, Volume 11 Issue 1, pp. 216-226.
- 8. **BARA' W. Al-Mistarehi;** Ahmad H. Alomari; Mohammed T. OBAIDAT; Areen AL-Jamal (2021):" Driver Performance Through the Yellow Phase Using Video Camera at Urban Signalized Intersection ", Received 11.10.2019; accepted in revised form 19.02.2021, Published and available online for publication in Transport Problems, Issue 1, Volume 16, March, 2021, DOI: 10.21307/tp-2021-005.
- 9. **BARA' W. Al-Mistarehi**; Taisir Khedaywi; Ahlam Khaled Hussein (2021):" Investigating the effects on creep and fatigue behavior of asphalt mixtures with recycled materials as fillers". Journal of King Saud University Engineering Sciences, Received 11 March 2020, Accepted 16 September 2020, Available online 24 September 2020, Volume (33); Issue (5); https://doi.org/10.1016/j.jksues.2020.09.004; July 2021; pp. 355-363.
- 10. **BARA' W. Al-Mistarehi**; Aslam Al-Omari; Madhar Taamneh; Rana Imam; Deya' Al-deen Khafaja (2021):" The Effects of Adding Nano Clay and Nano Zinc Oxide on Asphalt Cement Rheology ". Journal of King Saud University Engineering Sciences, Received 02 October 2020, Accepted 24 March 2021, Available online 01 April 2021,http: //doi.org/ 10.1016/j.jksues.2021.03.010; Published May 2023;Volume 35, Issue 4; pages 260-269.

- 11. Nawras Shatnawi; Mohammed T. Obaidat; **BARA' W. Al-Mistarehi** (2021):" Road pavement rut detection using mobile and static terrestrial laser scanning". Applied Geomatics Journal; Received: 21 January 2021 / Accepted: 27 August 2021; published 7 September 2021; https://doi.org/10.1007/s12518-021-00400-4; pp. 901-911.
- 12. **BARA' W. Al-Mistarehi**; Yassmen T. Obaidat; Taisir Khedaywi, Amro Thair Al-smadi (2022):"Behavior of modified asphalt using polystyrene concrete in static creep: Experimental and Numerical study". Iranian Journal of Science and Technology, Transactions of Civil Engineering; Received: 1 January 2020; Accepted: 27 February 2022; https://doi.org/10.1007/s40996-022-00866-1.
- 13. **Bara' W. Al-Mistarehi;** Ahmad H. Alomari; Rana Imam; Mohammad Mashaqba (2022): "Using Machine Learning Models to Forecast Severity Level of Traffic Crashes by R Studio and ArcGIS"; Computational Methods in Structural Engineering, a section of the journal Frontiers in Built Environment; Machine Learning Applications in Civil Engineering (Special issue); Received: 23 January 2022 Accepted: 14 March 2022 Published: 20 April 2022; https://doi.org/10.3389/fbuil.2022.860805.
- 14. <u>Bara' W. Al-Mistarehi</u>; Ahmad H. Alomari; Rana Imam; Tasneem K. Alnaasan (2022): "Investigating the Factors Affecting Speeding Violations in Jordan Using Phone Camera, Radar, and Machine Learning"; Computational Methods in Structural Engineering, a section of the journal Frontiers in Built Environment; Machine Learning Applications in Civil Engineering (Special issue); Received: 10 April 2022; Accepted: 25 May 2022; Published: 15 June 2022; https://doi.org/10.3389/fbuil.2022.917017.
- 15. Razan SBAIH; Rana IMAM; Mohammad ALHIARY; <u>Bara'AL-MISTAREHI</u> (2022): "Developing Prediction Models for Slope Variance From the International Roughness Index"; Transport Problems Journal; Received 22.01.2021; accepted in revised form 20.05.2022; Volume 17 Issue 2; DOI: 10.20858/tp.2022.17.2.08.
- 16. Ahmad H. Alomari; <u>Bara' W. Al-Mistarehi</u>; Tasneem K. Alnaasan; Motasem S. Obeidat (2023): "Utilizing Different Machine Learning Techniques to Examine Speeding Violations"; Applied Sciences, Journal by (MDPI), a section of the Transportation and Future Mobility; Advances in Vehicle Dynamics and Road Safety Technologies, Simulations and Applications (Special issue); Received: 22 March 2023; Accepted: 14 April 2023; Published: 20 April 2023; Appl. Sci. 2023, 13, 5113. https://doi.org/10.3390/app13085113.
- 17. Ahmad H. Alomari; **Bara' W. Al-Mistarehi**; Areen A. Al-Jammal; Taqwa I. Alhadidi; Motasem S. Obeidat (2023): "Modeling Driver at Urban Signalized Intersections Using Logistic Regression and Machine Learning"; Promet-Traffic& Transportation Journal; Publisher: Faculty of Transport and Traffic Sciences

- Submitted 25.04.2023; Accepted 9. 10.2023; 2023;35(6):838-854. https://doi.org/10.7307/ptt.v35i6.287.
- 18. Mohammed T. Obaidat, <u>Bara' Al-Mistarehi</u>, Tamara Hussein Bani Ata (2024): "Digital Mapping of Urban Arterial Roads Pavement Conditions", has been accepted for publication in International Journal of Information Sciences Letters, ISSN (print) 2090-9551; 13, No. 1, pp. 159-169; 2024; Accepted on 26 Oct. 2024; Published on 1, Jan. 2024.
- 19. **Bara' Al-Mistarehi**; Shadi Hanandah; Amir Ahtayat; Ali Qtaishat; Tariq K. Alhasan; Buthainah Al-kharabsheh; Rana Imam; Reem Abu Salim; Amro Alsmadi; Ashraf Abdallah (2024): "Investigating the Dynamic Creep and the Tensile Performance of Zeolitic Tuff-Modified Warm Asphalt Mixtures", has been accepted for publication in The Open Transportation Journal; ISSN 18744478; Accepted on 8, March. 2024.

B. International Conferences (Presentation and Proceedings Publications) after PhD:

- **1.** <u>BARA' W. Al-Mistarehi</u> (2021):" Applying Laser scanning and digital Photogrammetry for Developing an Archaeological Model Structure for Old Castle in Germany ". International Conference on Advances in Mechanical, Civil, and Construction Engineering (ICAMCCE) held in Singapore on 08 February, 2021; pp. 36-39.
- 2. <u>Bara' W. Al-Mistarehi¹*</u>, Ahmad H. Alomari², Maad M. Mijwil³, Taiser S. Khedaywi⁴, and Momen Ayasrah⁵ (2021): "Model Structure from Laser Scanner Point Clouds"; 2nd International Conference on Frontiers in Computing and Systems (COMSYS-2021); Department of Electronics & Communication Engineering and Department of Information Technology, North-Eastern Hill University, Shillong, Meghalaya, held in India on 29th September 1st October, 2021; pp 181–190.
- **3.** Ahmad H. Alomari¹; <u>Bara' W. Al-Mistarehi²</u>; Tasneem K. Alnaasan³ (2023): "Utilizing Different Machine Learning Techniques to Examine Speeding Violations."; presented (poster) at the Transportation Research Board (TRB) 2023 Annual Meeting; TRBAM-23-00106. WashingtonDC.

C. Papers Still Waiting Results:

- 1. Ahmad H. Alomari; **BARA' W. Al-Mistarehi**; Shahad H. Al-Sharafat (2021):" Evaluation of Two-Lane Roundabout and Traffic Signal Intersections: A Comparative Study ". Still waiting results from International Journal of Civil Engineering.
- 2. Rana Imam, Wassel Al-Bdour, <u>Bara' W. Al-Mistarehi</u>; Shadi Hanandeh (2021):" Modelling the Effects of Street Trees on Asphalt Concrete Pavements". Still waiting results from Road Materials and Pavement Design.

3. **BARA' W. Al-Mistarehi**; Khalid A.Ghuzlan; Saleh O. Lafi (2021):" Investigating the Dynamic Creep and the Indirect Tensile Performance of Sasobit-Modified Warm Asphalt Mixtures" Still waiting results from International Journal of Pavement Research and Technology.

D. OTHER RESEARCH:

<u>D.1:Published in refereed, specialized, international, and indexed journals before</u> <u>PhD:</u>

- 1. <u>Bara' Al-Mistarehi</u>, Mohammed T. Obaidat, Integration of GIS and PAVER System To Award efficient Pavement Management System (PMMS)- Case study-Irbid city- Jordan), has been accepted to publish in the journal of Advanced Science & Technology- Volume 2-Issue 4- December 2012- kuala lumpur, Malaysia.
- 2. <u>Bara' Al-Mistarehi</u>; Usage Mobile Phone for Pavement Distresses Measurement in Irbid city Jordan, has been accepted to publish in the journal of Revista Română de Inginerie Civilă, Volumul 4 (2013), Numărul 1.
- 3. <u>Bara' Al-Mistarehi</u>; GIS As a Tool to study Pavement distresses distribution in Irbid City— Jordan, has been accepted to publish in the journal of Revista Română de Inginerie Civilă, Volumul 5 (2014), Numărul 3
- 4. <u>Bara' Al-Mistarehi</u>; Superpave System versus Marshall Design Procedure for Asphalt Paving Mixtures (Comparative Study), has been accepted to publish in the Global Journal of Researches in Engineering (GJRE)-USA, by an international double blind peer reviewed research journal. Volume 14 (2014) Issue 5 Version 1.0

<u>D.2:. International Conferences (Presentation and Proceedings Publications) before PhD:</u>

- 1. <u>Bara' Al-Mistarehi</u>, Volker Schwieger, Mohammed T. Obaidat, Cost Efficient Camera System to Acquire Data for Pavement Maintenance Management System (PMMS), 3rd International Conference on Machine Control & Guidance, University of Stuttgart and University of Hohenheim in Stuttgart, Germany 27-28/3/2012.
- 2. <u>Bara' Al-Mistarehi</u>; Schwieger, V. (2015): Automated Detection for Pavement Crack for Mobile Mapping Data. Proceedings on 2nd International workshop on "Integration of Point- and Area-wise Geodetic Monitoring for Structures and Natural Objects", March 23-24, 2015, Stuttgart, Germany.
- 3. <u>Bara' Al-Mistarehi</u>; Schwieger, V. (2016): Automated Classification for Pavement Cracks for Mobile Mapping Data, FIG Working Week 2016. 2-6.05.2016, Christchurch, New Zealand.
- 4. Participate in 3rd International Conference on Machine Control & Guidance, University of Stuttgart and University of Hohenheim in Stuttgart, Germany 27-

- 28/3/2012, "Cost Efficient Camera System to Acquire Data for Pavement Maintenance Management System (PMMS) "In English Language.
- 5. Participate in 4rd International Conference on Machine Control & Guidance, University of Stuttgart and University of Hohenheim in Bonn, Germany 28-30/3/2013, In English language "letter of Acceptance".
- 6. Participate in 6th International Symposium on Networks for Mobility, University of Stuttgart, and center for Transportation Research in Stuttgart, Germany 27-28/9/2012. In English Language "letter of Acceptance".
- 7. Participate in 7th International Symposium on Networks for Mobility, University of Stuttgart, center for Transportation Research in Stuttgart, Germany 27-28/9/2013. In English Language "letter of Acceptance".
- 8. Participate in Workshop about image processing Techniques and Surveying Issues, Badnaizel, Germany (March 2013).
- 9. Participate in Workshop about Surveying and Geomatics Issues and their application of civil engineering application, Berlin, Germany (October 2010).

ATTENDED SHORT-COURSES, TRAINING, AND WORKSHOPS

- Training Course as a teacher assistant with Prof. Mohammed T. Obaidat in "Geographical Information System and Global Positioning System" which was held during the period June 16-21,2009 in the Consultative Center for Science & Technology in Jordan University of Science & Technology, Irbid –P.O.Box 3030- Jordan.
- Training Course in "AutoCAD 2D" which was held during the period June 8-15, 2008. in the Consultative Center for Science & Technology in Jordan University of Science & Technology, Irbid –P.O.Box 3030- Jordan.
- Training Course in "Primavera Project Planner (P3) for project Planning, Tracking, and Control" which was held during the period June in the Jordan Engineers Association, Irbid –P.O. Box 940188- Jordan.
- Training Course in "Paver Maintenance Highway Management System" that used it in M.Sc Courses Projects.
- Training Course in "Win lee Program Software for pavement design" that used it in M.Sc Courses Projects.
- Training Course in "Basher Program Software for pavement design" that used it in M.Sc Courses Projects.

- Training Course in "Everest Program Software for pavement design" that used it in M.Sc Courses Projects.
- Training Course in "SPSS Program Software for analysis" that used it in M.Sc Courses Projects.
- Training Course in "MPGAD Program Software for check safe pavement design" that used it in M.Sc Courses Projects.
- Training Course in "Design of structure against earthquakes" which was held during the period July. In the Jordan Engineers Association, Irbid –P.O. Box 940188- Jordan.

MASTER THESES SUPERVISION:

Advisor of the following Master Theses:

- 1. Deya' Al-deen Hayel Khafaja (2018): "Thesis titled: Effect of Using Nano Clay and Nano Zinc Oxide Modifiers on Asphalt Binder Rheology". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 2. Ahlam Khaled Hussein (2019): "Thesis titled: Effect of Filler Types on Creep and Fatigue of Asphalt Mixture". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 3. Ahmad Salah Ahmad Al-Momani (2019): "Thesis titled: Rutting Performance of Asphalt Mixtures with Gradations Designing Using Bailey and Conventional Superpave Methods". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 4. Saleh Othman lafi (2019): "Thesis titled: Investigating the Dynamic Creep and the Indirect Tensile Performance of SASOBIT-Modifiers Warm Asphalt". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 5. Shahad Hussein Al-Sharafat (2019): "Thesis titled: Evaluation of Two-lane Roundabouts and Signalized Intersections: A Comparative Study". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- Mohammad Samer Al-Zoubi (2019): "Thesis titled: Turning Movement Factors
 Associated with Saturation Flow Rate at Signalized Intersections in Jordan".
 Department of Civil Engineering, Jordan University of Science and Technology
 (JUST).

- 7. Alaa Saed Jassar (2019): "Thesis titled: The Relation between Average Speed, Speed Variation and Accidents Rates Using GPS Data and GIS". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 8. Areen Abdrabu Al-Jammal (2019): "Thesis titled: Analysis of Drivers' Behavior During Yellow Phase at Urban Signalized Intersections". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 9. Mohammed Noor Al-Masagbah (2020): "Thesis titled: Analysis of traffic accidents in Zarqa city using Geographic Information Systems". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 10. Reem Atef Abu-Saleem (2020): "Thesis titled: Investigating the dynamic creep and the indirect tensile performance of zeolite-modified warm asphalt mixtures". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 11. Naheel Gamal Ibrihiem (2020): "Thesis titled:"Impact of COVID-19 Pandemic on Ridership's Behavior toward Intelligent Transportation Services: A Case Study Jordan Hejaz Railway's Smart Booking System". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 12. Tasneam Khaled Al-Nasan (2022): "Thesis titled: Analysis of Speeding Violations Using Different Machine Learning Methods and Video Camera". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 13. Majdoleen Al-Sawabekyi (2022): "Thesis titled: Assessing the Effects of the Geometric Design and Land Uses on the Speed Profile and Reduction in Speed Rates at Roundabouts using Video Camera". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 14. Shareef Shaab (2022): Thesis titled: Assessment of the impact of the COVID-19 pandemic on daily trips in Salah al-Din Governorate Iraq using geographic information systems ". Department of Civil Engineering, Jordan University of Science and Technology (JUST).

Co-advisor of the following Master Theses:

 Momen Abdel-Raheem Ayasrah (2017): "Thesis titled: Model Structure from Laser Scanner Point Clouds". Department of Civil Engineering, Jordan University of Science and Technology (JUST).

Member in the committee for the following Master Theses:

- Rabea Saleh Al-Jarazi (2017): "Thesis titled: Effect of On-Street Parking and Pedestrian Crossing on Through Traffic in Jordan". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- Dania Mohammad Al-Oqaily (2019): "Thesis titled: Different Analytical Techniques to Model the SUPERPAVE Dynamic Shear Rheometer (DSR) Outcomes". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 3. Saja Faleh Al-khateeb (2019): "Thesis titled: Prediction of Risk Factors Influencing Severity Level of Traffic Accidents Using Artificial Intelligence". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 4. Bayan Ibrahim Hamdan Al-Khreisat (2019): "Thesis titled: Investigating the Potential of Using Dry Batteries Waste Powder (DBWP) as a Modifier for Asphalt Binders". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 5. Tasneem Hussein Hmoud Kwylih (2019): "Thesis titled: Potential of Computer-Vision Cellular-Phone Based System to Extract Traffic Parameters". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 6. Moad Marwan Yousef Barakat (2019): "Thesis titled: Forecasting Flexible Pavement's Temperatures by Fourier Series Formulas Using MATLAB r2016b". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 7. Shaden Kaabeneh (2019): "Thesis titled: Operational Performance Comparison between Roundabouts Controlled by Police Enforcement and Roundabouts Controlled by Metering Signals". Department of Civil Engineering, The University of Jordan.
- 8. Amena Naser Abu-Yamin (2019): "Thesis titled: Effectiveness of Automated Speed Enfocement Cameras Program on the Urban Roads of Amman". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 9. Amjad Al-sheradiahi (2019): "Thesis titled: Evaluation of Rutting for Northern Roads in Jordan Using Geomatics Techniques". Department of Civil Engineering, Jordan University of Science and Technology (JUST).

- 10. Anas Abu Aliaa (2019): "Thesis titled: Investigation of the Bond Strength at the Asphalt-Aggregate Interface using the Binder Bond Strength Device". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 11. Esra Al-Fuqara (2020): "Thesis titled: Properties of Pozzolan-modified asphalt using Superpave tests". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 12. Wafa Al-Ghazawi (2020): "Thesis titled: Evaluation of Travel Time Reliability in Urban Areas During COVID-19 Pandemic Case Study: Irbid City". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 13. Muna Ismail (2020): "Thesis titled: Development of Price Elasticities for Public Transport in Amman". Department of Civil Engineering, The University of Jordan.
- 14. Farah Amarah (2020): "Thesis titled: Safety of Elderly Drivers' in Jordan". Department of Civil Engineering, <u>The University of Jordan.</u>
- 15. Razan abd Al-Hakim Sabeha (2020): "Thesis titled: Developing a Relationship between the International Roughness Index (IRI) and the Slope Variance (SV)". Department of Civil Engineering, The University of Jordan.
- 16. Ali Sawqey (2021):__"Thesis titled: Evaluating the level of Service (LOS) Improvement from Implementing conventional And Unconventional Intersection Designs: Case Study of Waha Circle". Department of Civil Engineering, The University of Jordan.
- 17. Hanen Al-Masri (2021): "Thesis titled: Driver Behavior and Gap-Acceptance Characteristics at Roundabouts in Jordan". Department of Civil Engineering, The University of Jordan.
- 18. Batool Bani Mustafa (2021): "Thesis titled: Evaluation of the Effect of Automated Speed Enforcement Camers in terms of Speed and Road Safety on Rural Highways in Jordan". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 19. Rawan AL-Smadi (2021): "Thesis titled: Highway Geometric Design Elements Effect on Traffic Accidents in Jordan". Department of Civil Engineering, Jordan University of Science and Technology (JUST).
- 20. Haitham Omar Yacoub Saleh (2022): "Thesis titled: Effect of Using Oil Shale Ash on Geotechnical Properties of Lime-Stabilized Expansive Soil". Department of Civil Engineering, Jordan University of Science and Technology (JUST).

- 21. Natalie Hussam Masarwa (2023): "Thesis titled: Artificial Intelligence for Signal Optimization". Department of Civil Engineering, <u>The University of Jordan.</u>
- 22. Suleiman Ahmad AlWarawrah (2023): "Thesis titled: Implementation of Truck-Only Toll Lanes on the Desert Highway". Department of Civil Engineering, <u>The University of Jordan.</u>
- 23. Batool Omar Maqableh (2023): "Thesis titled: Performance of Unconventional Intersections in The Era of Autonomous Vehicles". Department of Civil Engineering, The University of Jordan.
- 24. Mira Youssef Mohammad Jbarah (2023): "Thesis titled: Applications of UAV Imagery with Machine Learning for Precision Agriculture in Jordan". Department of Geomatics Engineering, <u>Al-Balqa Applied University</u>, <u>Salt-Jordan</u>.
- 25. Zaid Issa Arrasheed (2023): "Thesis titled: The Risks and Effects of Distracted Driving from Mobile Phones and Other Behaviours when Driving in Jordan". Department of Civil Engineering, <u>The University of Jordan.</u>
- 26. Orouba M. Al-Abbadi (2023): "Thesis titled: The Ability of Transforming Jordan into a Regional Aviation Hub: A Case Study of Queen Alia International Airport". Department of Civil Engineering, <u>The University of Jordan.</u>

HONOR AND AWARDS

- Honored the President and Dean medals for all semesters during undergraduate study.
- Ranked the first student with honor for the undergraduate.

SKILLS

- Mastering computer programming in C++.
- MatLab.
- Mathcad.
- - Etabs
- Meshlab
- Quick Terrian Reader (QTR).
- Labveiw
- GIS
- Spreadsheet: MS-Excel.
- Word Processing: MS-Word, Power Point, Access, and others.
- Graphics Software: Grapher, Surfer and others.
- Internet Communications
- Mastering much other software.

- Good Command in English, and Germany Language in addition to my mother Language (Arabic).

ACTIVITIES AND COMMUNITY SERVICE

- Member of engineering association and other associations
- Member of Center International Migration and Development (CIM) program, it is organized by Deutsche Gesellschaft Fur Internationale Zusammenarbeit (GIZ) GmbH, Amman, Jordan.

LANGUAGES:

- Excellent Command of English language : (Reading, Writing, Listening & Speaking)
- Germany Language : (Listening & Speaking).
- Arabic: Native Speaker.

REFERENCES

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