



Name: Dr. Ahmad Aiash

Rank: Assistant Professor – Civil Engineering

Personal Information

Nationality:	Syrian
AU Joining Date:	25-August-2024
E-Mail Address:	a.aiash@au.edu.kw

Professional Information

Education:	- PhD in Civil Engineering – Transportation UPC - Universitat Politècnica de Catalunya, Spain. Oct. 2023 - Master of Science in Civil Engineering Kuwait University, Kuwait. Aug. 2019 - Bachelor of Science in Civil Engineering Kuwait University, Kuwait. Dec. 2015
Specialization:	Civil Engineering – Transportation
Current Academic Position:	Assistant Professor – Civil Engineering
Current Professional Positions:	NA
Previous Administrative Position Held:	NA
Previous Academic Positions Held:	- PhD candidate at UPC - Universitat Politècnica de Catalunya, Spain. Oct 2020 - Oct 2023 - Guest researcher at the University of Twente, The Netherlands. April – Sept 2023
Fellowships And Honors:	- Fellowship at Doctoral Training Network (DTN) - EIT Urban Mobility (2021 – 2023). - Former member of American Society of Civil Engineers (ASCE) - Kuwait Chapter. - Member of Kuwait Society of Engineers.

	- Member of the technical program committee of Special session: Data Science and Artificial Intelligence for Social Good: Opportunities and Challenges (DSAI4SG'2023). - Organizing committee of 2025 5th International Conference on Logistics System, Traffic and Transportation (LSTT 2025). - Alternate Member of the Electoral Board 2021/2022 at UPC - Universitat Politècnica de Catalunya, Spain. - Spring semester honor list 2013/2014 (Kuwait University). - Fall semester honor list 2014/2015 (Kuwait University). - Spring semester honor list 2014/2015 (Kuwait University). - Second best video award for presenting PhD 2022 (DTN EIT Urban Mobility). - Annual Forum 2021 for Doctoral Training Network (DTN) - EIT Urban mobility - Munich (Germany). - Annual Forum 2022 for Doctoral Training Network (DTN) - EIT Urban mobility - Barcelona (Spain). - Annual Forum 2023 for Doctoral Training Network (DTN) - EIT Urban mobility - Helsinki (Finland).
Teaching Experience:	- PhD candidate at UPC - Universitat Politècnica de Catalunya, Spain. - Guest researcher at the University of Twente, The Netherlands.
Industrial And Technical Experience:	- Student consultant (External) Freelance at EIT Urban Mobility. Feb. 2023 – 2025. - A reviewer for Journal of Ambient Intelligence and Humanized Computing, Scientific Reports journal, Transactions on Intelligent Transportation Systems Journal, Stochastic Environmental Research and Risk Assessment Journal, Transportation Research Interdisciplinary Perspectives Journal, Transportation Research Board (TRB) annual meeting, Transportation Research Record (TRR) Journal, KSCE Journal of Civil Engineering, International Conference on Mechanical, Journal of Urban Mobility, Electric and Industrial Engineering & The 7th International Conference on Water Resource and Environment (WRE 2021). - Site Engineer at Heavy Engineering Industries & Shipbuilding Co. (HEISCO) K.S.C. Oil & Gas Operation, Kuwait. 2016 – 2017. - Young Civil Engineers Training Program - Training Course. Two weeks training in Sabah Al Salem University City, Kuwait. Summer 2015.
Research Interest:	- Transport planning, Road safety, and Data analysis.
Research Grants:	- A Comprehensive Analysis of GCC Traffic Accidents with Machine Learning Techniques. MSc thesis, funded by the College of Graduate Studies (CGS), Kuwait University. Research Grant No. [EV 01/18]

Research and Publications including Journal and Books:

- Aiash, A., A Comprehensive Analysis of GCC Traffic Accidents with Machine Learning Techniques. MSc thesis (2019)
- AlKheder, S., AlRukaibi, F. & Aiash, A. Drivers' response to variable message signs (VMS) in Kuwait. Cognition, Technology & Work. 21, 457–471 (2019). <https://doi.org/10.1007/s10111-019-00538-7>
- AlKheder, S., AlRukaibi, F. & Aiash, A. Vehicle inspection policy and emission analysis in Kuwait. Environmental Geochemistry and Health. 42, 3415–3429 (2020). <https://doi.org/10.1007/s10653-020-00584-5>
- AlKheder, S., AlRukaibi, F. & Aiash, A., Risk analysis of traffic accidents' severities: An application of three data mining models. ISA Transactions, 106, 213-220 (2020). <https://doi.org/10.1016/j.isatra.2020.06.018>.
- Aiash, A., Robusté, F., Traffic accident severity analysis in Barcelona using a binary probit and CHAID tree. International journal of injury control and safety promotion. 29(2), 256-264 (2022). <https://doi.org/10.1080/17457300.2021.1998136>
- Aiash, A., Robusté, F., Working hours and traffic accident injuries: case study in Barcelona. Transportation Research Procedia. 58, 678-682 (2021). <https://doi.org/10.1016/j.trpro.2021.11.089>
- Aiash, A., Robusté, F., Traffic crash injuries occurrence varieties across Barcelona districts. Revista Internacional de Desastres Naturales, Accidentes e Infraestructura Civil. 22, 6 (2022). https://www.scipedia.com/public/Aiash_Robuste_2022a
- AlKheder, S., AlRukaibi, F. & Aiash, A., Analysis of risk factors affecting traffic accident injury in United Arab Emirates (UAE). European Journal of Trauma and Emergency Surgery. 48, 4823–4835 (2022). <https://doi.org/10.1007/s00068-022-02010-0>
- AlKheder, S., AlRukaibi, F., Aiash, A., Weather risk contribution to traffic accidents types in Gulf Cooperation Council (GCC) countries. Natural Hazards. 114, 2177–2187 (2022). <https://doi.org/10.1007/s11069-022-05466-w>
- AlKheder, S., AlRukaibi, F. & Aiash, A., Support Vector Machine (SVM), Random Forest (RF), Artificial Neural Network (ANN) and Bayesian Network for prediction and analysis of GCC traffic accidents. Journal of Ambient Intelligence and Humanized Computing. 14, 7331–7339 (2023). <https://doi.org/10.1007/s12652-022-04441-4>
- Aiash, A., Robusté, F., Total noise level's passive impact on traffic crashes: a potential distraction indicator. International Journal of Environmental Studies. 81(3), 1058-1070 (2023)

	https://doi.org/10.1080/00207233.2023.2213131 - Aiash, A., Robusté, F., COVID-19 pandemic effects on traffic crash patterns and injuries in Barcelona, Spain: An interpretable approach. XA2ITS: Explainable AI for Intelligent Transportation Systems. Book chapter. (2023) https://doi.org/10.1201/9781003324140-4 - Aiash, A., Robusté, F., Analyzing pedestrians' crash injury risk factors in Barcelona. Transportation Research Procedia. 71, 235-243 (2023). https://doi.org/10.1016/j.trpro.2023.11.080 - Aiash, A., Urban Mobility Safety in Barcelona: An evaluation of risk factors and techniques to achieve Vision Zero. PhD thesis, (2023) http://hdl.handle.net/10803/690695.
Paper Presentations at Professional Conferences:	- The 4th North American IEOM Society International Conference 2019, Toronto (Canada). Road Safety Modeling in Kuwait. http://ieomsociety.org/toronto2019/papers/51.pdf - Conference on Transport Engineering, CIT2021 - Burgos (Spain). Working hours and traffic accident injuries: case study in Barcelona. https://doi.org/10.1016/j.trpro.2021.11.089 - Conference on Transport Engineering, CIT2023 - la laguna (Canary Islands). Analyzing pedestrians' crash injury risk factors in Barcelona. 2023 https://doi.org/10.1016/j.trpro.2023.11.080
College Service including committee Membership:	NA
National Service:	NA
College Committees:	– Chair of Validation and Modification Committee, in College of Engineering, Australian University-Kuwait – Member of Curriculum Committee, in College of Engineering, Australian University-Kuwait – Member of Labs and Development Committee, in College of Engineering, Australian University-Kuwait – Member of Credit Transfer Committee, in College of Engineering, Australian University-Kuwait – Member of Students Appeals & Complaints Committee, in College of Engineering, Australian University-Kuwait

	– Member of Research & Faculty Development Committee, in College of Engineering, Australian University-Kuwait – Member of Departmental Disciplinary Committee, in College of Engineering, Australian University-Kuwait
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