



Dr. Mohammad Shihadeh Arar

Academic Rank

Associate Professor

Department of Architecture

College of Architecture Art & Design

Ajman University

Qualifications

- Ph.D. in Urban Environmental Studies from Rensselaer Polytechnic Institute, Troy - New York, USA. 1995
- Master of Architecture from California State Polytechnic University Pomona. Los Angeles USA 1986
- Bachelor of Architecture from University of Louisiana. Lafayette, USA 1984
- Bachelor of City and Regional Planning from University of Louisiana. Lafayette USA 1984

Academic Experience

- Associate Professor, Program Coordinator, Department of Architecture, College of Architecture Art & Design, Ajman University (May, 2019 - Present), Ajman, United Arab Emirates.
- Associate Professor, Program Coordinator, Department of Architectural Engineering, College of Engineering, Ajman University (May, 2013 - May, 2019), Ajman, United Arab Emirates.
- Head of Department, Department of Architectural Engineering, College of Engineering, Ajman University of Science & Technology (November, 2007 - May, 2012), Ajman, United Arab Emirates.
- Assistant Professor Academic Coordinator, Department of Architectural Engineering, College of Engineering, Ajman University of Science & Technology (August, 2004 - November, 2007), Ajman, United Arab Emirates.
- Head of Department, Applied Sciences University (May, 2000 - July, 2001), Amman, Jordan.
- Assistant Professor, Applied Sciences University (August, 1997 - May, 2000), Amman, Jordan.
- Teaching Assistant, Rensselaer Polytechnic Institute. Troy, New York (August, 1991 - May, 1993), Troy, New York.
- Lecturer, Jordan University of Science and Technology (AY1989 - 1990), Irbid, Jordan.

Research field(s)

- Urban and Environmental Studies
- Architecture & Built Environment
- Urban Planning
- Urban design
- Sustainable Architecture

Publications *(Last five years)*

- Mohammad Arar, Mohammed Sherzad, Nashwa Shiqwarah. (March 9, 2024) [The Interpretation of Rem Koolhaas' Spatial Composition and Program Methodologies](#). 6th Kuala Lumpur International Conference on Education, Economics and Technology (KLICEET2024) e-ISSN: 2976-3932 Kuala Lumpur, Malaysia.
- Afaq H. Chohan, Jihad Awad, Muhammad A. Ismail, Mohammad S. Arar (March 2024) [Integrating Technology and Heritage Design for Climate Resilient Courtyard House in Arid Region](#). Civil Engineering Journal. Q1
- Chuloh Jung, Muhammad A. Ismail, Mohammad Arar, Nahla Al Qassimi. (March 2024) [Mitigating indoor air pollution in UAE's high-rise apartment buildings: a study on eco-friendly materials and adsorbents](#). Smart and Sustainable Built Environment. Q*
- Mohammad Arar, Mohammed Sherzad, Nashwa Shiqwarah. (Dec. 15, 2023) [Analyzing the Spatial Composition via Datascape Design Methodology in MVRDV's Projects](#). International Journal of Advanced Research in Technology and Innovation e-ISSN: 2682-8324 | Vol. 5, No. 4, 1-17, 2023 <http://myjms.mohe.gov.my/index.php/ijart>.
- Jung, C., Arar, M. (June 2023). [Natural vs. Artificial Light: A Study on the Influence of Light Source on Chlorophyll Content and Photosynthetic Rates on Indoor Plants](#). *Buildings Q1*
- M. Arar, M. Sherzad, N. Al Qassimi, C. Jung (March 2023). [The Significance of Frank O. Gehry's Museums in Contemporary Museum Design Methodology](#). International Journal of Advanced Research in Engineering Innovation e-ISSN: 2682-8499 | Vol. 5, No. 1, 20-36, 2023 <http://myjms.mohe.gov.my/index.php/ijare>.
- C. Jung, M. Salameh, M. Sherzad, M. Arar, (March 2023). [The Changes in Indoor Air Pollutant Concentration in Nursery in Dubai, United Arab Emirates](#). International Journal of Advanced Research in Engineering Innovation e-ISSN: 2682-8499 | Vol. 5, No. 1, 47-56, 2023 <http://myjms.mohe.gov.my/index.php/ijarei>.
- Nahla Al Qassimi, Chuloh Jung, Mohammad Arar (Dec. 31, 2022) [The Analysis of the Contemplative Space of Tadao Ando's Architecture](#). International Journal of Advanced Research in Engineering Innovation. e-ISSN: 2682-8499 | Vol. 4, No. 4, 101-116, 2022 <http://myjms.mohe.gov.my/index.php/ijarei>
- M. Arar, M. Sherzad, N. Al Qassimi, C. Jung (Dec. 1, 2022). [Extracting the Ideal Floor Plan Proportion from Tadao Ando's Housing Floor Plans](#). International Journal of Advanced Research in Engineering Innovation. e-ISSN: 2682-8499 | Vol. 4, No. 4, 30-43, 2022 <http://myjms.mohe.gov.my/index.php/ijare>.
- M. Sherzad, M. Arar, C. Jung (30 September, 2022). [Analyzing the Architectural Characteristics of Tadao Ando's Museum Projects](#). International Journal of Advanced Research in Engineering Innovation. e-ISSN: 2682-8499 | Vol. 4, No. 3, 1-17, 2022 <http://myjms.mohe.gov.my/index.php/ijare>.
- M. Arar, C. Jung (Nov 14, 2022). [Analyzing the Perception of Indoor Air Quality \(IAQ\) from a Survey of New Townhouse Residents in Dubai](#). Sustainability Q1
- Elkhazindar, A.; Kharrufa, S.N.; Arar, M.S. (July 28, 2022). [The Effect of Urban Form on the Heat Island Phenomenon and Human Thermal Comfort: A Comparative Study of UAE Residential Sites](#). Energies. Q1

- J. Awad, M. Arar, C. Jung, B. Boudiaf (Sep 1, 2022). [A Comparative Analysis of Heritage Districts in Dubai, Sharjah and Ajman in the United Arab of Emirates \(UAE\)](#). Heritage Q*
- Jung, C.; Al Qassimi, N.; Arar, M.; Awad, J. (March 16, 2022). [The Improvement of User Satisfaction for Two Urban Parks in Dubai, UAE: Bay Avenue Park and Al Ittihad Park](#). Sustainability Q1
- Arar, M Jung, C., Al Qassimi (Jan. 28, 2022). [Investigating the Influence of the Building Material on the Indoor Air Quality in Apartment in Dubai](#). Frontiers in Built Environment, Q1.
- Emad Mushtaha ^a, Aseel Ali Hussien ^a, Mohammad Arar ^b, Siti Aekbal Salleh ^c, Amani Mohammad ^a, Wedad Masoud ^a, Zeena Ahmed ^a, Hind Almubyedh (Jan.7, 2022). [Artificial lighting systems and the perception of safety in underpass tunnels](#). Tunneling and Underground Space Technology incorporating Trenchless Technology Research. Q*
- Jung, C., Al Qassimi, N., Arar, M. & Awad, J. (Nov. 25, 2021). [The Analysis of Indoor Air Pollutants from Finishing Material of New Apartments at Business Bay, Dubai](#). Frontiers in Built Environment, Q1. 7 (765689)., doi: 10.3389/fbuil.2021.765689.
- Arar, M., Jung, C (Nov. 18, 2021). [Improving the Indoor Air Quality in Nursery Buildings in United Arab Emirates](#). International Journal of Environmental Research and Public Health. Q2. <https://doi.org/10.3390/ijerph182212091>.
- Arar, M., Jung, C., Awad, J., & Chohan, A. H. (Nov.5, 2021). [Analysis of Smart Home Technology Acceptance and Preference for Elderly in Dubai, UAE](#). Designs, Q2. doi: 10.3390/designs5040070.
- Jung, C., Sherzad, M., & Arar, M. A. (Nov. 1, 2021). [Re-Evaluating Luis Baragán's Emotional Architecture with the Concept of Synesthesia](#). International Journal of Advanced Research in Engineering Innovation, 3 (3), 84-97.
- Jung, C., Sherzad, M., & Arar, M. A. (Nov. 1, 2021). [The Analysis of Peter Zumthor's Emotional Architecture in Therme Vals](#). International Journal of Advanced Research in Engineering Innovation, 3 (3), 98-111.
- Chohan, A., Memon, Z. A., Che-Ani, A. I., Arar, M. S., & Awad, J. A. (Jan. 31, 2021). [Adaptation of Grid Tied Photovoltaic \(GT-PV\) System as Retrofit Renewable Energy Model for Single-Family House in UAE](#). International Journal of Integrated Engineering, 13 (1), 130-147.
- Jung, C., Sherzad, M., & Arar, M. (Sep. 25, 2021). [The Analysis of the Spatial Configuration of Rem Koolhaas' Seattle Public Library](#). International Journal of Advanced Research in Engineering Innovation.
- Arar, M., Jung, C., & Al Qassimi, N. (June 1, 2021). [The Typology of Water Composition in Tadao Ando's Architecture](#). Asian Journal of Arts, Culture and Tourism.
- Jung, C., Sherzad, M., & Arar, M. (Sep. 2021). [The Analysis of the Spatial Configuration of Rem Koolhaas' Seattle Public Library](#). 2nd International Multidisciplinary Conference on Business, Education and Engineering, Kuala Lumpur: Asian Scholars Network.
- Jung, C., Sherzad, M., & Arar, M. (Sep. 2021). [Re-Evaluating Luis Baragán's Emotional Architecture with the concept of Synesthesia](#). 2nd International Multidisciplinary Conference on Education, Innovation and Social Sciences 2021.
- Jung, C., Sherzad, M., & Arar, M. (Oct. 2021). [The Analysis of Peter Zumthor's Emotional Architecture in Therme Vals](#). ASNet Virtual Conference on Education, Social Sciences and Technology 2021.
- Jung, C., Sherzad, M., & Arar, M. (2Oct. 021). [The Implementation of the Concept of Atmosphere in Kazuyo Sejima's Architecture](#). ASNet International Conference on Education, Engineering and Social Sciences 2021.
- Jung, C., Arar, M., & Al Qassimi, N. (March 2021). [An Analysis of Steven Holl's Phenomenological Design Approach in Nelson-Atkins Museum of Art](#). 2nd International Conference on Business, Education, Social Sciences and Technology 2021.
- Arar, M. S., Jung, C., & Al Qassimi, N. (March 2021). [The Typology of Water Composition in Tadao Ando's Architecture](#). 4th ASNet International Multidisciplinary Academic Conference 2021.
- Jung, C., Arar, M., & Al Qassimi, N. (Feb. 2021). [An Analysis of Architecture as an Installation Art in Kengo Kuma's works](#). 2nd International Conference on Education, Social Sciences and Engineering 2021 Int.
- Jung, C., Arar, M., Awad, J., & Boudiaf, B. (Feb. 2021). [The Comparative Analysis of the Use of Rapid Prototyping in Small- & Mid-Size Firms in Dubai and Gehry Partners LLP](#). 2nd International Multidisciplinary Conference on Education, Social Sciences & Technology (IMCEST 2021).
- Jung, C., Arar, M., & Al Qassimi, N. (Feb. 2021). [An Analysis of Peter Zumthor's Architecture based on Regionalism](#). 3rd International Conference on Business, Education, Innovation and Social Sciences 2021).
- Jung, C., Arar, M., & Al Qassimi, N. (2021). [An Analysis of Architecture as an Installation Art in Kengo Kuma's works](#). International Journal of Advanced Research in Engineering Innovation.

- Jung, C., Arar, M., & Al Qassimi, N. (2021). [An Analysis of Steven Holl's Phenomenological Design Approach in Nelson-Atkins Museum of Art](#). *International Journal of Advanced Research in Engineering Innovation*.
- Wahid, J., Abdullah, A., Saleh, B., & Arar, M. (June, 2021). [Classification of Malaysian Architecture Revisited](#). *Review of Urbanism and Architectural Studies*.
- Wahid, J., Saleh, B., Arar, M., & Awad, J. (Feb, 10 ,2020). [URBANISATION IN AJMAN PUSHING BY HOUSING DEVELOPMENT](#). *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 11 (7)., doi: 10.14456/ITJEMAST.2020.129.
- Karsono, B., Arar, M., Wahid, J., & Saleh, B. (Feb. 18, 2020). [Bamboo Application in Building Design: Case Study - Bali Indonesia](#). *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*.
- El Khazindar, A., Kharrufa, S. N., & Arar, M. (Nov. 2020). [The Effect of Urban Form on the Heat Island Phenomena: A comparative study between old and new residential settlements in the UAE](#). *Rapid Cities – Responsive Architectures*. AMPS American University in Dubai.
- Wahid, J., Saleh, B., Arar, M., & Awad, J. (June, 2019). [Urbanization in Ajman: Pushing by Housing Development](#). *Conference - Workshop on Sustainable Architecture & Urban Design ICWSAUD*.
- Karsono, B., Arar, M., Wahid, J., & Saleh, B. (June, 2019). [Bamboo Application in Building Design: Case Study – Green School, Bali, Indonesia](#). *Conference - Workshop on Sustainable Architecture & Urban Design ICWSAUD*.
- Awad, J., Saleh, B., Wahid, J., & Arar, M. (2018). [The Design Determinants in Residential Indoor Air Quality](#). *4th International Conference - Workshop on Sustainable Architecture & Urban Design ICWSAUD 2019*.
- Arar, M. A. (2015). Title of Publication: [Dubai Metro and the New Build Environment and Urban Life at Sheikh Zaid Road](#). *Transformation of the urban character of Arab Cities, since the late last century, Proceedings of the International Conference held at German Jordanian University Amman- Jordan*.
- Boudiaf, B., Arar, M. & Mekky, S. (Dec.27, 2012). Title of Publication: [The impact of the commercial activities on the urban scape of the historic city center with a case study of some cities in the U.A.E](#). *Dubai 3rd International Architectural Conservation Conference*.
- Hamid, F., Arar, M., & Mushtaha, E., [Urban Form Types and Some Related Social Problems of Multi-Story Housing in Britain and the Gulf Region](#), *The IRAQ JOURNAL OF ARCHITECTURE* ISSN: 1999-1738. Nov. 2011.
- Mushtaha, E., Arar, M., & Hamid, F., [Assessment Tools: Mathematical Factorial and Adjacency Distribution Theory for Housing Typology in Gaza City](#), *International Journal of Civil & Environmental Engineering IJCEE-IJENS* Vol: 11 No: 02, April. 2011.
- Mushtaha, E., & Arar, M., [House Typology from Adjacency Diagram Theory to Space Orientation Theory](#), *International Journal of Architectural Research* Volume (4) - Issue (1) - March 2010.
- Arar, M. A. (2006). "[Dubai City and the Challenges of Creating Sustainable Developments](#)". *9th Sharjah Urban Planning Symposium: Territorial outlook and sustainable development: Globalization, Devolution and the Challenge of Governance*.
- Arar, M. A. (2005). "[Urban Planning Conference in Sharjah, the present and the future challenges](#)". *8th Sharjah Urban Planning Conference: Federalism and strategic Planning coordination: Theory, Practice and the case of the U.A.E*.

Courses Taught (Last five years)

- Architectural Design IV
- Architectural Design V
- Architectural Design VI
- Housing Theory & Design
- Urban Planning
- Urban Design
- Graduation Project I

- Graduation Project II
- Studio I – Graduate level
- Studio II - Graduate level
- Thesis, Thesis I & II Graduate level

Graduate Theses & Master Dissertations

- Academic Supervisor for the post graduate student Kareen Alan Kamal Kazaz, Master thesis title: “Analysis of Walkability in Low-rise Outdoor Areas in Dubai” Expected to complete the thesis. May 2025.
- Academic Chair Committee Member for the defense of Master Student Nour El Hoda Djellali, thesis title: “Implication of contemporary architecture on Dubai’s Identity: A Study of Tourists’ perceptions.” December 20, 2023.
- Academic Supervisor for the post graduate student Othman Abdulaziz Alkubise, Master thesis title: “The Trend of Compact City distribution in Urban Development Communities in Dubai”. December 18, 2023.
- Academic Chair Committee member for the defense of Master Student Oussama Yahia, thesis title: “The Assessment of Mall of The Emirates Station Area According to Transit-Oriented Development Strategy (TOD).” December 21, 2022.
- Academic Committee member for the defense of Master Student Bashair AlQubisi, thesis title: “The Effects of Pandemics on Urban Design” December 20, 2022.
- Academic Chair Committee Member for the defense of Master Student Abdel Wahab AIOsaj, thesis title: “Impact of weather conditions on pedestrian shopping behavior”. May 2022.
- Academic Supervisor for the post graduate student Basel Mohamad M. AlAfandi, Master thesis title: “The effect of urban morphology in mitigation UHI; the case of SHK. Mohammed Bin Rashid Housing Program”. April 2021.
- Academic Supervisor for the post graduate student Shafiya Rizwan, Master thesis title: “The social impact of distinctly designed urban residential neighborhoods of Dubai Using space syntax to evaluate morphological discrepancies”. January 2021.
- Academic Committee member for the defense of Master student Ayat El khazindar, thesis title: “The effect of urban form on the heat island phenomena”. June 2020

Professional Experience

- Supervised the graduation research project titled “Masfout Eco – Retreat” the project vision is to create a world destination nestled among Masfout's mountains in Ajman celebrating both nature and the rich culture of its people, and with stunning landscapes and engage in authentic cultural experiences, fostering a deep connection to Masfout's beauty and community in Ajman Emirate. The project is part of coordination with Ajman Municipality for 2023-2024.

- Supervised students in the final urban design model for the newly developed study area in Ajman City. The students participated effectively in the vision of Ajman heart competition organized by Ajman Authority. They have presented several urban design scenarios as a futuristic vision for Ajman. April 2023.
- Working with Sheikh Zaid Housing development for future master planning and designing strategies. 2019 - present.
- Ajman Municipality, Member of the committee to evaluate professional consultant firms' projects for Urban Development Plan in Ajman City. 2006 - 2008
- Architectural consultant, Architectural consultant in Toronto, Ontario, Canada. 2002
- Architect in charge of the As-Built Drawings at Binladen Company for one of the biggest projects in K.S.A., The project consists of 2592 villas and includes the site development.1990

Committees Work

- Program Coordinator for the Master of Urban Design Program, CAAD, Ajman University
- Program Coordinator Department of Architecture, CAAD, Ajman University
- Academic/ Curriculum committee (Chair) – College Level
- Interview Search Committee (member) - College Level
- Review committee (Chair) - Department Level
- College Effectiveness Committee (Chair) - College Level
- WASC Accreditation Committee Member – University Level
- QAA Recommendation No. 1 Committee Member - University Level
- IE Coordinator. Institutional Effectiveness Committee Member - University Level
- Course Schedule + Time Table + Part Timers – Department Level
- Master program & Arch-Eng. program committee – Department Level
- Training committee – Department Level
- Accreditation committee – {Chair} Department & College Level

Honors and Awards

- Best supervised Research for graduation Project under the title “AGRICULTURAL RESEARCH CENTER” AY 2023- 2024
- Certificate of Appreciation in recognition of outstanding achievements by Ajman University January 2023.
- Best supervised Research for graduation Project under the title “A creative Village for Cultural Significance.” AY 2020 - 2021
- Supervised undergraduate students' graduation projects and achieve an outstanding result by winning an honorable mention in P&T competition for my graduate students' project., P&T competition. 2019
- Supervised fourth year students in Urban Design Course and achieving outstanding results by winning two honorable mentions in P&T competition for my fourth-year students., P&T competition.2019
- Supervised team of student to win the first place in "Smart Cities and Green Innovation" competition., International Environmental Competition (March 2016).
- Supervised the wining Student Graduation Project, Tamayouz International Award (October 2016) " Excellence in Architecture graduation projects worldwide". 2016
- Supervised the team of students in Ajman Event City competition Third Place, Ajman International Award for Urban innovation (March 2015).

- Supervised the student to win the first place in Sama Dubai competition observation Tower Competition 2008.

Other Contributions and Achievements

- Represented the college in preparing the necessary documents for WASC, the international members who visited Ajman University in November 2023.
- Participated and presented the architecture department in the UIA 2023 World Congress of Architects in Copenhagen Denmark under the title "Architectural Education for a Sustainable Future" July 2023.
- Jury member to evaluate student's Graduation projects at American University Ras Al-Khaimah. May 2023.
- Chair Committee member is preparing the architectural program documents for CAA, during the reaccreditation of Feb. 2023.
- Department representative in preparing the implementing action plans for QAA recommendations and Good Practice # 3 Sep. 2022.
- Committee member is preparing the architectural program documents for UIA, during the initial validation in 2019 and the revalidation in March 2022.
- Jury member to evaluate student's design projects at American University Ras Al-Khaimah (Urban Design Project Evaluation). 2020
- Jury member to evaluate student's design projects at Amity University (Final Graduation Project Evaluation). 2018 - 2019
- Jury member to evaluate student's design projects at American University Dubai (Urban Design Project Evaluation). 2017
- Jury member to evaluate student's design projects at University of Sharjah (Final Graduation Project Evaluation). 2015 - 2016
- Jury member to evaluate student's design projects at American University of Sharjah (Final Graduation Project Evaluation). 2011
- Jury member to evaluate student's design projects at American University of Sharjah (Final Graduation Project an Urban Design solution to Sharjah International Airport). 2010
- Juror Participant for thesis project at the university of Science and Technology, Irbid Jordan. 2001
- Juror Participant for thesis project at Petra University Amman Jordan. 2000

Workshops Participation

- Interactive Presentations and Making Videos Using MS PowerPoint January 18, 2024
- Blended Course Design Principles Online Webinar March 15, 2024
- Creating Effective Team Application Exercise Training Workshop May 2, 2024
- Facilitating TBL: Strategies for Using Questions in Class (Zoom) May 3, 2024
- Mastering Conditional Access in Moodle: Enhancing Navigation and Engagement May 22, 2024
- Best Practices in Proctoring Exams April 29, 2024
- Effective Assessment of Courses and Programs
- Best Exam Invigilation Practices Arabic August 30, 2024
- Assessments in Moodle September 30, 2024