# Ali Keyvanfar, Ph.D., Associate Professor

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#### **CURRICULUM VITAE**

Analytical, visionary professional with nearly ten years of high-impact experience across higher education and international construction, entrepreneurship, and sustainable development consulting environments. Proven record of teaching, research, development (R&D), and community services focusing on computer-aided decision-making for sustainable construction, green materials, green architecture, and sustainable urban and infrastructure development. Strong business acumen coupled with new product/service business model development, traction planning, and fundraising. Articulate communicator continually focused on building teamwork, problem-solving, and strengthening relationships across educational groups, community stakeholders, international partners, and peers. A collaborative leader and dedicated scientist skilled in research leadership.

### **CURRENT HIGHLIGHT**

- In Dec. 2024, excited to Join the Louisiana Board of Regents Grant Review Board. Board of Regents Support Fund provides \$20M annually.
- In Nov. 2024, I was honored to receive the APEX Outstanding Research Award at a special KSŪ presidential reception.
- In Nov. 2024, honored to serve as a panelist for "Teaching with Al" at KSU's Celebration of Teaching Day.
- In September 2024, elected to work as an associate chair of the KSU graduate curriculum committee.
- Aug. 2024 through Nov. 2024, accepted into the 2024 cohort of NSF-CMMI Game Changer Academies for Advancing Research Innovation, a 12-week professional development program focused on deliberative democracy in the NSF review process.
- In May 2024, successfully completed the esteemed Governor's Teaching Fellows (GTF) program, focusing on the integration of AI in educational environments, following the nomination by the Provost as KSU's candidate and completion endorsed by Governor Kemp.
- In May 2024, selected as one of 25 nationwide faculty for the fully sponsored "Advancing Faculty Skills in Mass Timber Construction Workshop" at Michigan State University, June 24-26, 2024.
- In April 2024, received the Dean's Distinguished International Achievement Award.
- In April 2024, our KSU student team (Co-advised by Dr. Minsoo Beak and myself) won 1st place in the Sustainable Demolition competition. Florida State 2nd, Florida International 3rd, and Georgia Tech 4th place.
- In April 2024, facilitated a conference session on the Application of Generative AI in the Built Environment at Emory.
- Started March 2024, supporting early-stage startups within the MassChallenge Venture Capital expert network.
- In March 2024, Junched international Special issue with University of Kansas on "Transition Urban Infrastructure Systems into a Sustainable Future."
- In February 2024, facilitated a campus-wide workshop on harnessing AI for research communication.
- Started Jan. 2024, joining the National Highway Work Zone Safety Committee representing AGC.
- Started Jan. 2024, partnering with two major international projects focusing on leadership and entrepreneurship education for sustainable development (supported by a \$19 million U.S. Department of State fund).

#### **FELLOWSHIPS**

# NSF Division of Civil, Mechanical, and Manufacturing Innovation

#### C-GCA academics, Summer and Fall 2024

Contributed to integrating group decision-making best practices in the NSF review process, enhancing evaluation methodologies for impactful funding. Louise McBee Institute of Higher Education at the University of Georgia, Georgia, USA

#### Governor's Teaching Fellow (GTF), May 2024

Developed Al integration strategies for educational environments, representing KSU as the Provost-nominated candidate. Received certification cosigned by Georgia Governor Brian Kemp.

CIFAL Atlanta, a research center under the UN Institute of Training and Research, Georgia, USA

#### UN SDG faculty fellow, 2020-2021

Led efforts to benchmark KSU's SDG initiatives, launched an international SDG entrepreneurship program, enhanced campus-wide SDG engagement, and secured KSU's inclusion in THE Impact Rankings.

Universiti Teknologi Malaysia (UTM), Johor Bahru, and Kuala Lumpur, Malaysia

# International Doctoral Fellowship, 2010-2013

Secured five research funds (\$250K). Published six indexed manuscripts. Successfully mentored three master's degree students.

# **ACADEMIC POSITIONS**

## Kennesaw State University (KSU), Georgia, USA

#### Tenured faculty member, Department of Construction Management, 2024- forward

(Role) To establish pedagogical innovation methodologies in all types of modalities, including online/E-learning (60% workload); To establish a recognized research lab/center with benefit to local, state, federal, and intentional stakeholders (20% workload); To work in leading service capacities helping academic stakeholders while generating revenue for university (20% workload).

(Achievement) Secured 2 PTC patents, released two products for public use, led a KSU partnership in a \$3 million project funded by the U.S. Department of State, and joined two key national and state-level committees in my field.

# Tenure track faculty member, Department of Construction Management, 2019-2023

(Role) To perform HIP teaching and learning methodologies (mainly developing undergraduate research courses) in all types of modalities, including online/E-learning (60% workload); To establish recognized research projects with benefit to local, state, federal, and intentional audiences (20% workload); To work in leading service capacities for students, department, college, KSU, and construction professional and community (20% workload).

(Achievement) Secured \$175,000 in internal and \$420,000 in external funds, published 17 high-impact 1st author Q1 and Q2 articles; led two special issues in Q1 journals; led a major campus-wide IRB committee for two years; led and initiated DEI committee, initiatives, and policies in college, initiated Undergraduate Research courses DOP programs in the department. Secured tenure thresholds in the pre-tenure review.

## Center for Energy Research, University of California, San Diego (US San Diego), California, USA

#### Collaborating Professor / Visiting Scholar, 2018-2019

(Role) To explore technology transfer opportunities and secure research fund

(<u>Achievement</u>) Established a variety of validated partnership development service packages for international fundraising, generating significant income (\$400k) per program. (<u>Project(s) Focused</u>: Application of solar forecasting in the smart and sustainable built environment for building users)

# Universidad Tecnológica Equinoccial, Quito, Ecuador

# Visiting Professor, Faculty of Built Environment, 2017-2019

(Role & Achievement) Forming faculty research groups (4 in construction and 4 in architectural and urban studies). Planning the unveiling of the UCSD/MIT-UTE construction research center. Executing 60 hours of interactive professional workshops to perform entrepreneurship research resulted

in 20 publications and the launching of three different university service packages for local industries. (Project(s): Zero Energy Cooling Wall, Construction Project Death Cycle destruction Framework, Construction Project CSR app development, UAV readiness, Group construction decision making).

## Universiti Teknologi Malaysia (UTM), Johor Bahru, and Kuala Lumpur, Malaysia

#### Adjunct Associate Professor, Faculty of Built Environment, 2017-2018

(Role & Achievement) Supervise students in supporting their publication output (10 publications), financial aid issues (secured \$20k scholarship), and master thesis projects (3 projects). Solicit national and international research funds by conducting workshops to promote the university and faculty and initiate international collaboration (1 collaboration for five projects UTE-UTM).

## Senior Lecturer (equivalent to Assistant Professor (Tenured) in UK educational system), 2014-2017

#### Construction Research Centre, Faculty of Civil Engineering, UTM Kuala Lumpur & Johor Bahru, Malaysia

(Role) To perform research teaching and learning methodologies (mainly developing graduate research courses- Masters and Ph.D.) in all types of modalities, including online/E-learning (30% workload); To establish high-impact research projects with benefit to local and intentional audiences (60% workload); To work in research service capacities helping students and center (10% workload).

(Achievement) secured 100 (over 100 points) teachings, research, and service annual evaluation results every year.

## Postdoctoral Researcher, 2013-2014

## Construction Research Centre, Faculty of Civil Engineering, UTM Kuala Lumpur & Johor Bahru, Malaysia

(Achievement) Obtained two research funds (\$150K). Published one special issue and three publications. Completed a patent filing. Received a university award, Gold Medal & Jury Award. Supervised and mentored three Research Assistants. Performed TA duties in MSc. Construction Management.

#### **SERVICES**

### Kennesaw State University (KSU), Georgia, USA

#### Associate Chair of KSU Graduate Policies and Curriculum Committee, 2024-current

(Role) Responsible for overseeing the development and review of university-level GPCC meetings, ensuring they align with institutional goals and accreditation standards. Also, collaborate with the KSU graduate college faculty approval committee and the KSU curriculum executive committee to enhance academic quality and support innovative approaches in campus-wide curriculum development.

## Member of KSU Curriculum Executive Committee, 2024- current

(Role) Responsible for overseeing the agenda of review of university-level UPCC and GPCC meetings, ensuring they align with institutional goals and accreditation standards. Also, collaborate with the KSU graduate college faculty approval committee and the KSU curriculum executive committee to enhance academic quality and support innovative approaches in campus-wide curriculum development.

#### Chair of Institutional Review Board (IRB), 2021-2023

(Role) To establish university-level procedures and policies (in line with public policies) and support board members in reviewing KSU research protocols involving human subjects research design (Qualitative and Quantitative research, including data gathering, data analysis, and reporting to subjects); and to chair the board meetings to ensure a transparent decision.

(Achievement) Recruited a full supportive office (Staff Development), supported over 700 protocols, established more than ten university-level policies, and scheduled several staff development, professional development, and leadership development workshops.

### Chair of the College Diversity, Equity, and inclusion (DEI) committee, 2022-2023

(Role) To advocate for policies and strategic plans that promote diversity, equity, and inclusion by culture (not just numbers) in the college workplace. The mission fosters an inclusive learning and work environment (through program development and program management) that promotes understanding and appreciation for difference through initiatives, operating programs, research, services, and training.

(Achievement) Developed and approved a 5-year DEI strategic and action plan, Secured more than \$70k in funds (internal and external) to intensify the implementations and implement the curriculum development, conducted multiple training for professional development of staff and faculty on grant writing for governmental and or nonprofit organizations, integrated DEI in college Bylaws, formed the DEI committee and recruited members, and established award nomination workflow for leadership development.

# Chair of College Curriculum Committee (CCC), 2022-2023

(Role) To officially process college proposals that enhance teaching and learning curriculum development; to overview curriculum shortcomings and optimize academic plans with CCC proposals; to chair the college and IAB committees; to validate CCC decisions to align with NAAB/ACCE/ABET criteria. (Achievement) Organized college-level workshops for faculty to learn from best practices in online teaching, Developed a workflow of departmental approval for a college-level review, and administrated needed platform changes.

# Chair of CMD curriculum committee (DCC), 2021-2022

(Role) To officially process IAB-approved curriculum proposals; to overview curriculum shortcomings and optimize academic plans with DCC proposals; to chair the departmental and IAB committees; to validate DCC decisions to align with ACCE/ABET accreditation criteria.

(<u>Achievement</u>) Developed three double graduation pathways for undergraduate students to get master's in MBA, MPA, and CM in a shorter timeframe. Establish three generic courses for an internship, special topics, and directed study in the undergraduate curriculum.

#### Elected Member and secretary of College Faculty Council (CFC), 2021-2024

(Role) To consult with the dean in policy and planning, to overview and support other college committees and college boards for policy or proposal approval or decision making, and to be the voice of faculty to the dean.

(Achievement) Led the effort to update college bylaws, collect comments, and edit and get approval. Supported college P&T updates.

# Accreditation Board of Engineering and Technology (ABET), Baltimore, Maryland, USA

# Program Evaluator, 2017-present

(Role) Perform yearly assessments of undergraduate programs in construction engineering and technology (and management) across the USA (or international schools) on accreditation exercises; Coordinating with ASCE supporting teams under accreditation program chairs and ABET accreditation team chairs; Improve the self-performance based on annual peer reviews and self-reflection.

(Achievement) Honored with two recognition letters (2019 and 2022) from ABET CEO.

# Universiti Teknologi Malaysia (UTM), Johor Bahru, and Kuala Lumpur, Malaysia

# MIT-UTM- Sustainable Cities Program, Managing Editor, 2015-2016

(Role & Achievement) Constructing and arranging of peer-reviewing process, developing and following the editorial workflow (language proofreading arrangement, generating similarity reports, arrangements of copyright agreements), developing and following decision-making structure in publishing several manuscripts, special issue arrangements with the journal, and coordination with program stakeholders.

#### **EDUCATION**

Ph.D. in Civil Engineering, Construction Management and Sustainable Design, 2013, Universiti Teknologi Malaysia, Malaysia (MIT collaborating campus for sustainable cities research in ASEAN)

MSc. in Construction Management, Construction Quality Management, 2009, Universiti Teknologi Malaysia, Malaysia

BEng. in Civil Engineering, 2004, Islamic Azad University, Sanandaj Branch, Sanandaj, Kurdistan

#### **GRADUATE STUDENTS**

- Supervised 9 Master's students at Kennesaw State University (6 in Information Technology and 3 in Construction Management).
- Mentored over 7 PhD candidates at Universiti Teknologi Malaysia (2 in Material Science, 5 in Civil Engineering).
- Guided students through all stages of research, from proposal to defense.
- I co-authored over 30 publications, nine patent filings, five product developments, and ten innovation presentations with students.
- Provided career mentorship, contributing to successful industry and academic placements.

#### **TEACHING COURSES**

#### Kennesaw State University (KSU), Georgia, USA

*Undergraduate course- CM3400-Risk and Quality Management (2019- current):* This course focuses on developing risk management steps before and after signing the construction contract. It includes the development of a risk log, risk assessment, risk response planning, and risk control strategies. The course also briefs on quality assurance, quality control, costs of quality, and quality management tools and methods (3 credit hours).

Undergraduate course- CM4512- Emerging trends in residential construction (2019- current): This course reviews emerging trends in the residential building industry. Students will learn about trends and how to manage these trends as modern risk factors in residential construction (3 credit hours).

**Undergraduate course- CM3910- Sustainable Residential Practices (2020):** This course emphasizes the techniques and methods of sustainable construction for the residential building industry. Also, students will explore sustainable residential construction assessment indexing systems and factors, then apply the indexing in a few case studies of sustainable assessment (assessment of construction material and method) (3 credit hours).

*Graduate course- CM6901- Applications of Genrarteive AI in Construction Management (2025-forward):* This course applies Generative AI to construction management, focusing on lean development, AI tool creation, and validation. Students gain hands-on experience in developing and implementing AI-driven solutions for industry challenges (4 credit hours).

**Graduate course- CM6600- Construction Risk Analysis and Control (2020 -current):** This course focuses on classic and modern risk management, including risk identification, risk assessment, risk management, risk mitigation, acceptance, and transfer. Risk of quality, Quality assurance, and Quality control is also introduced (4 credit hours).

Graduate course- CM6901- Modern risk management in construction (2020 -current): Students in this directed study will learn the principles of modern risk management in a case study. Students should apply critical thinking to research the construction of social sustainability, social tolerance, and associated social carrying capacity. The core material consists of learning research (4 credit hours).

### UC San Diego (US San Diego), California, USA

*Graduate / professional course- Entrepreneurship research (2018-2019):* The course introduces steps to transfer an idea to an award-winning product, designing postgraduate research to develop a successful spin-off.

# Universiti Teknologi Malaysia (UTM), Johor Bahru, and Kuala Lumpur, Malaysia

*Graduate course- Construction Project Management (2013-2017):* The course reviews the History of PM, PM drivers and skills, PM monitoring and control, and PM problem-solving. Also, there are some highlights about PMBOK, PMI certificates, Decision-making methods (AHP, ANP, GGDM, Delphi, and Brainstorming), Project Complexity, Innovation Management, and Dynamic Modeling.

Graduate course- Research Methodology (2016-2017): This course reviews Research Design, Construct Development, Data Collection & Analysis, and Report Writing. Course Highlights are on Scopus citation analysis, topic selection, and research for the Development of New Products & Services.

*Graduate course- Construction Scheduling (2016-2017):* The course introduces WBS, CPM, and MSP/P6. Course Highlights are Dynamic scheduling, n-D scheduling, and UAV in construction.

*Undergraduate course- Structure Lab (2016-2017)* The course introduces basic and standard lab tests in commercial structure and also, and the course touches on the theoretical analysis of experimental error calculation for each test.

# **PROFESSIONAL AFFILIATIONS**

- 1. Georgia Academy of Science (2023- current)
- 2. AGC of America's Highway Work Zone Safety Committee (2023- current)
- 3. PhD panel at a diverse list of international universities (2016-current)
- 4. Program evaluator, Accreditation Board for Engineering and Technology-ABET (2017-current)
- 5. Grant proposal review panelist, Louisiana Board of Regent grants (2024- current)
- 6. Grant proposal review panelist, MOHE/MOSTI grants, Malaysian Government (2015- current)
- 7. Grant proposal review panelist, Czech Science Foundation (2022- current)
- 8. Faculty Member, Construction Management Association of America- CMAA (2017-18)
- Associate Member, American Society of Civil Engineering-Construction Institute-ASCE-CI (2014-18)
- 10. Associate member, Association of Researchers in Construction Management -ARCOM/ (2013-18)
- 11. Journal editor, Buildings (Academic Journal) (2023-current)
- 12. Journal guest editor, Sustainability (Academic Journal) (2020-current)
- 13. Journal associate editor, Frontier in Built Environment (construction management) (Academic Journal) (2022- current)
- 14. Journal guest editor, ASCE Journal of Urban Planning and Development (2020-current)
- 15. Managing Editor, Massachusetts Institute of Technology (MIT) Malaysia Sustainable Cities Program, 2015(Aug.)-2016(Aug.).
- 16. Conference co-editor, ICONBUILD 2015 and 2017 Indonesia
- 17. Conference co-editor, Flood Disaster Conference 2016 & SEPKA-ISEED 2016, Malaysia
- 18. Conference co-editor, 2018 5th International Conference on Civil and Urban Engineering (ICCUE 2018), Spain
- 19. Journal reviewer, SUSTAINABLE CITIES AND SOCIETY (Q2, Index in ISI & Scopus, IF: 7.587).
- 20. Journal reviewer, ASCE JOURNAL OF ARCHITECTURAL ENGINEERING (Q1, Index in ISI & Scopus)
- 21. Journal reviewer, ENERGY POLICY (Q1, Index in ISI & Scopus, IF: 6.142)
- 22. Journal reviewer, CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY (Q2, Index in ISI & Scopus, IF: 3.636)
- 23. Journal reviewer, MATERIAL AND DESIGN (Q1, Index in Thomson Reuters & Scopus, IF: 7.991)
- 24. Conference reviewer, Associated Schools of Construction- ASC (2014- current)

### PROJECT & GRANTS

# International Research & Exchanges Board Global Solutions Sustainability Challenge

visibility, Duration: 2023-2025, Role: KSU leading partner/PI, Fund: \$ 950,000.00, Funder: US Departmnet of State

The Institute of International Education's Harnessing Innovation through Virtual Exchange for Enhanced Results, Duration: 2023-2025, Role: KSU leading partners (R). Funds \$ 3,100,000,000, Funders US Department of Chata

leading partner/PI, Fund: \$ 2,100,000.00, Funder: US Department of State

One Climate Earth (Confidential contract)

Developing DEI-connected UR research course projects in architecture and construction management curriculum, Duration: 2022-2027, Role: PI, Fund: \$ 50,000.00, Funder: KSU

A Decision Support Tool for DEI Assessment of KSU Buildings: Beyond Accessibility, Duration: 2022-2023, Role: PI, Fund: \$18,000.00, Funder: KSU Entrepreneurship research for sustainable construction, Duration: 2019-2022, Role: PI, Fund: \$ 420,000.00, Funder: KSU and KU Bahrain

Role: Co-PI, Fund: \$ 100,000.00, Funder: Mosti, Malaysia

Construction-Neighborhood Social Sustainability, Duration: 2020-2022, Role: PI, Fund: \$ 30,000.00, Funder: KSU Risk, and Failure of Group Decision Making in the Ecuadorian Construction, Duration: 2017-19, Role: PI, Fund: \$60,000, Funder: UTE, Ecuador Readiness Level of Ecuador Construction Industry for UAV Applications, Duration: 2017-19, Role: PI, Fund: \$ 60,000.00, Funder: UTE, Ecuador

Underground metro construction in Quito: Investigation delay factors, Duration: 2017-2019, Role: PI, Fund: \$ 60,000.00, Funder: UTE, Ecuador Development of drivers green travel behavior assessment model towards low energy and low emission urban transportation. Duration: 2015-2018.

Effect of Asymmetrical Street Aspect Ratios in Micro-Climate in Hot Humid Region, Malaysia as a Case Study, Duration: 2015-2017, Role: Co-PI, Fund: \$ 10,000.00, Funder: UTM, Malaysia

Innovative Construction of Floating Light-Weight Affordable House Designed for Flood Resistant, Duration: 2015-2017, Role: Co-PI, Fund: \$ 10,000.00, Funder: UTM, Malaysia

Innovative Design and Technology for Sustainable Post-Disaster Settlement, Duration: 2015-2017, Role: PI, Fund: \$ 10,000.00, Funder: UTM, Malaysia Short-term performance of waterproof concrete admixture using crystalline nanomaterial, Duration: 2015-17, Role: PI, Fund: \$ 10,000, Funder: UTM. Sustainable flood resilience housing development in Malaysia: Towards the development of building assessment tool, Duration: 2015-2017, Role: Pl, Fund: \$ 20.000.00. Funder: MOHE. Malavsia

Adaptive Energy Behaviors: Design for Sustainable Energy Efficiency Behaviour in Cooling Indoor Environment of Office Building, Duration: 2015-2017, Role: PI, Fund: \$ 10,000.00, Funder: UTM, Malaysia

Sustainable Energy Efficient: Energy Intensity of Users Satisfaction From Energy Behavior in Building Design, Duration: 2015-2017, Role: PI, Fund: \$ 10,000.00, Funder: UTM, Malaysia

Malaysian Green Highway Index, Duration: 2012-2016, Role: Co-PI, Fund: \$ 150,000.00, Funder: Malaysian Highway Authority, Malaysia

Development of Bio-Material for Strengthening Reinforced Concrete, Duration: 2012-2016, Role: Co-Pl, Fund: \$ 100,000.00, Funder: MOSTI, Malaysia

# **Selected Publications**

Jonaidi, M., Kaplan, A., & Keyvanfar, A. (2024). Innovative Approaches and Challenges in the Demolition of Large-Span Post-Tensioned Beams: Insights from a Case Study. Buildings, 14(5), 1380.

El-Itr, Z., Keyvanfar, A., Integrating Generative AI into Affordable Housing Strategies for Georgia: A Framework Proposal (2024), CITC-14

Shafaghat, A., Keyvanfar, A., et al. (2023) Special Collection on Urban Physics and COVID-19 Pandemic Risk Management

M Khorami, M., Keyvanfar, A., Shafaghat, A, Jaonaidi (2023), Patent: Fluid Injector Aerial Vehicle, PCT/IB2023/061980

M Khorami, M., Keyvanfar, A., Shafaghat, A, Jaonaidi (2023), Patent: Aerial Vehicle Flying Station, PCT/IB2023/061984

Shafaghat, A., Keyvanfar, A., & Rosli, N. A. L. (2023). Urban Plaza as a School for Children: A Decision Support Tool for the Design of Children Inclusive Urban Plaza. Architecture and Urban Planning, 19(1), 17-28.

Keyvanfar, A. (2023) Construction Risk Analysis and Control, KSU Distinguished Course Repository, 2 (3) page 4

Shafaghat, A., Keyvanfar, A., & Ket, C. W. (2023). A decision support tool for evaluating the wildlife corridor design and conservation performance using analytic network process (ANP). Journal for Nature Conservation, 70, 126280.

Shafaghat, A., Ferwati, S., & Keyvanfar, A. (2022). COVID-19-Adapted Multi-Functional Corniche Street Design Assessment Model: Applying Global Sensitivity Analysis (GSA) and Adaptability Analysis Methods. Sustainability, 14(17), 10940.

Shafaghat, A., & **Keyvanfar. A.** (2022) Dynamic façades design typologies, technologies, measurement techniques, and physical performances across thermal, optical, ventilation, and electricity generation outlooks." Renewable and Sustainable Energy Reviews 167: 112647. **A Keyvanfar,** A Shafaghat, MZ Majid (2022) Adaptive Behavior Satisfaction Index Analysis Framework for Assessing Cooling Energy Efficient Building

Indoor Environment: Applying Kano Model, International Journal of Civil Engineering, 1-20

Keyvanfar, A., Shafaghat, A., & Rosli, N. A. L. (2022). A Decision Support Toolkit for the Design of Children-Oriented Urban Outdoor Learning Environments. Journal of Urban Planning and Development, 148(3), 04022034.

Keyvanfar, A. & Shafaghat, A. (2022) Emerging Dimensions of Unmanned Aerial Vehicle (UAV) Technology's 3D Reconstruction Modeling and Photogrammetry in Architecture and Construction Management. ACE Architecture, City and Environment (2022), 16 (48) 1-16

Keyvanfar, A. Shafaghat, A., & MSF Rosley (2022). Performance Comparison Analysis of 3D Reconstruction Modelling Software in Construction Site Visualization and Mapping, International Journal of Architectural Computing (2022), 1-23.

Keyvanfar, A., Shafaghat, A., & Awanghamat, M. A. (2022). Optimization and trajectory analysis of drone's flying and environmental variables for 3D modelling the construction progress monitoring. International Journal of Civil Engineering, 20(4), 363-388.

Keyvanfar, A., Shafaghat, A., Ismail, N., Mohamad, S., Ahmad, H. Multifunctional Retention Pond For Stormwater Management: A Decision-Support Model Using Analytical Network Process (ANP) And Global Sensitivity Analysis (GSA)(2021) Ecological Indicators, 124, Art. No. 107317.

Ferwati, M. S., Keyvanfar, A., Shafaghat, A., & Ferwati, O. (2021). A Quality Assessment Directory for Evaluating Multi-functional Public Spaces. Architecture and Urban Planning, 17(1), 136-151.

Keyvanfar, A., Shafaghat, A., Ya Acob, N., Roslan, A. Sustainable Post-Disaster Settlement (SPS) Assessment Model For Evaluating Performance Of Construction Management In Post-Flood Risk-Reduction And Recovery (2021) Journal Of Sustainability Science And Management, 16 (5), Pp. 174-199. Muhammad, N.Z., **Keyvanfar, A.,** Shafaghat, A., Majid, M.Z.A., Mirza, J., Mccaffer, R., Aliyu, M.M. Optimization Of Nano Silicon For Integral Mixing In Cement Mortar: A Response Surface Methodology Approach (2020) AIP Conference Proceedings, 2284, Art. No. 020009.

**Keyvanfar, A.,** Shafaghat, A., Inn, T.S., Mohamad, S. A Sustainable Urban Farming Index Assessment Model For Evaluating Food Productivity That Applies Multi-Criteria Decision-Making Methods — A Case Study In Malaysia (2020), Sustainability Science & Management, 15(7), Pp:123-146. Salim Ferwati, M., Wadi, R.S., Ferwati, O., Keyvanfar, A., Shafaghat, A. Emerging Factors Shaping Identity Of Indigenous Urbanism Concurrently Adopting Modernity In Qatar: The Application Of Diffusion Theory (2020) Architecture, City And Environment, 14 (42), Art. No. 8362,

Ferwati, M.S., Alsuwaidi, M., Shafaghat, A., Keyvanfar, A. Employing Biomimicry In Urban Metamorphosis Seeking For Sustainability: Case Studies (2019) Architecture, City And Environment, 14 (40), Pp. 133-162.

Ferwati, M.S., Al Saeed, M., Shafaghat, A., Keyvanfar, A. Qatar Sustainability Assessment System (QSAS)-Neighborhood Development (ND) Assessment Model: Coupling Green Urban Planning And Green Building Design (2019) Journal Of Building Engineering, 22, Pp. 171-180.

Shafaghat, A., Jing, K.S., Keyvanfar, A., Jamshidnezhad, A., Lamit, H., Khorami, M. An Urban River Park Restoration Assessment Model Using Analytical Network Process (ANP)(2019) Journal Of Environmental Treatment Techniques, 7 (1), Pp. 92-102.

Keyvanfar, A., Shafaghat, A., Muhammad, N.Z., Ferwati, M.S. Driving Behaviour And Sustainable Mobility-Policies And Approaches Revisited (2018) Sustainability (Switzerland), 10 (4), Art. No. 1152.

Keyvanfar, A., Ferwati, M.S., Shafaghat, A., Lamit, H. A Path Walkability Assessment Index Model For Evaluating And Facilitating Retail Walking Using Decision-Tree-Making (Dtm) Method (2018) Sustainability (Switzerland), 10 (4), Art. No. 1035.

Muslim, N.H., Keyvanfar, A., Shafaghat, A., Abdullahi, M.M., Khorami, M. Green Driver: Travel Behaviors Revisited On Fuel Saving And Less Emission (2018) Sustainability (Switzerland), 10 (2), Art. No. 325. **Keyvanfar, A.**, Shafaghat, A., Mohamad, S., Abdullahi, M.M., Ahmad, H., Derus, N.H.M., Khorami, M. A Sustainable Historic Water Front Revitalization

Decision Support Tool For Attracting Tourists (2018) Sustainability (Switzerland), 10 (2), Art. No. 215.

Muslim, B., Shafaghat, A., Keyvanfar, A., Ismail, M. Green Driver: Driving Behaviors Revisited On Safety (2018) Archives Of Transport, 46 (3), Pp. 49-78.

- Taheri, M.M., Shirdar, M.R., Keyvanfar, A., Shafaghat, A. Evaluating Hydrothermal Synthesis Of Fluorapatite Nanorods: Ph And Temperature (2017) Journal Of Experimental Nanoscience, 12 (1), Pp. 83-93.
- Shafaghat, A., Ying, O.J., Keyvanfar, A., et al. A Treatment Wetland Park Assessment Model For Evaluating Urban Ecosystem Stability Using Analytical Hierarchy Process (AHP) (2019) Journal Of Environmental Treatment Techniques, 7 (1), Pp. 81-91.
- Dedasht, G., Zin, R.M., Ferwati, M.S., Abdullahi, M.M., Keyvanfar, A., Mccaffer, R. Dematel-Anp Risk Assessment In Oil And Gas Construction Projects (2017) Sustainability (Switzerland), 9 (8), Art. No. 1420.
- Shafaghat, A., Mir Ghasemi, M., Keyvanfar, A., Lamit, H., Ferwati, M.S.Sustainable Riverscape Preservation Strategy Framework Using Goal-Oriented Method: Case Of Historical Heritage Cities In Malaysia (2017) International Journal Of Sustainable Built Environment, 6 (1), Pp. 143-159.
- Muslim, N.H., Mohamed, M.I., Amin, Z.M., Shafaghat, A., Ismail, M., Keyvanfar, A. Ground Penetrating Radar's (Gpr) Imaging And Applications To Pavement Structural Assessment: A Case Of Malaysia (2017) Archives Of Transport, 42 (2), Pp. 39-51.
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