Junaid Ahmad

Assistant Professor

NUST Institute of Civil Engineering

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About

Dr. Junaid Ahmad is working as Assistant Professor in the NUST Institute of Civil Engineering. Dr. Junaid Ahmad has a PhD in Structural Engineering. Dr. Junaid Ahmad has published 20 research articles & conference papers having a citation count of 285, carried out 6 projects and filed 0 intellectual property.

Qualifications

PhD in Structural Engineering 2017 - 2021
University of Wollongong , Australia

MS in Structural Engineering 2012 - 2015
UET Taxila , Pakistan

BS in Civil Engineering 2006 - 2010
UET Taxila , Pakistan

Experience

Assistant Professor 2025- Present
NUST Institute of Civil Engineering

Assistant Professor 2021 - 2021
NUST Institute of Civil Engineering

Assistant Professor 2021 - 2021
NUST Institute of Civil Engineering

Lecturer 2017 - 2021
NUST Institute of Civil Engineering

Lecturer 2015 - 2017
(Do Not Use-Duplicate)NUST Institute of Civil Engineering

Casual Academic 2018 - 2021
University of Wollongong , NSW, Australia

Junior Engineer (Civil) 2011 - 2015
Water and Power Development Authority Pakistan (WAPDA) , Tarbela

Junior Engineer 2011 - 2011
NESPAK , NESPAK Lahore

Planning Engineer 2010 - 2011
M/S Choudhry Construction Company , Rawalpindi

Awards

Commendation Award 2021
Commendation Award on outstanding PhD Thesis from University of Wollongong, Australia.

Certificate of Merit 2011
Merit Certificate was awarded by the University of Engineering and Technology Taxila, Pakistan to top 5% students of the undergraduate passing out batch.

Professional Memberships

PEC Since 2010

Industry Projects

National Projects

Non-destructive Testing of R.C.C Structures at Bhara Kaho Fly-Over Islamabad - ECSP 2024
Client: M/S Engineering Consultancy Services Punjab
Amount: PKR 156,000.00
Status: Completed

Provision of Consultancy Services for Non-Destructive testing (NDT) of Business District Building, DHA-5, Express Highway, Islamabad 2024
Client: M/S Comrades Planning & Design
Amount: PKR 1,460,000.00
Status: Completed

Provision of Consultancy services for the Ultrasonic Pulse Velocity Testing of a Transom at Bara Kahu Bypass 2023
Client: M/S Innovative Nanoengineering Consulting Engineers
Amount: PKR 90,000.00
Status: Completed

Provision of Consultancy Services for Core Testing of the Project "ESTABLISHMENT OF CANCER HOSPITAL, PIMS, ISLAMABAD" 2024
Client: Pak PWD
Amount: PKR 205,000.00
Status: Completed

Non-Destructive testing of Drains at PN Farms Islamabad 2023
Client: PN Farms Scheme Islamabad
Amount: PKR 80,000.00
Status: Completed

Provision of Consultancy Services for Feasibility Study and Rehabilitation Design of Bhakkar-DI Khan Bridge 2023
Client: Khyber Pakhtunkhwa Highway division
Amount: PKR 2,535,000.00
Status: Completed

International Projects

Research Articles

Sustainable multifunctional biochar-based cementitious composites for carbon sequestration, energy storage, and smart infrastructure applications: A review 2025
Hilal Khan Zamil Bin Zahid Fazal Hussain Junaid Ahmad Rao Arsalan Khushnood
Case Studies in Construction Materials, Volume:23, Article Number e05117
Impact Factor: 6.600 | **Quartile:** 1
DOI: https://doi.org/10.1016/j.cscm.2025.e05117

Development of extrusion based artificial lightweight aggregates from sand-plastic waste composite for sustainable concrete production: Performance evaluation and Life Cycle Assessment 2025
Hilal Khan Junaid Ahmad Zamil Bin Zahid Shoaib Irfan Muhammad Umer
Case Studies in Construction Materials, Volume 22, Article Number e04663
Impact Factor: 6.500 | **Quartile:** 1 | **Citations:** 3
DOI: https://doi.org/10.1016/j.cscm.2025.e04663

Mechanical performance and life cycle assessment of alkali-activated concrete with municipal-waste incinerated bottom ash as partial precursor 2025
Muhammad Muneeb Nawaz Hammad Anis Khan Junaid Ahmad Muhammad Noman
Multiscale and Multidisciplinary Modeling, Experiments and Design, Volume 8, Article Number 279
Impact Factor: 1.900 | **Quartile:** 2 | **Citations:** 1
DOI: https://doi.org/10.1007/s41939-025-00865-5

Effect of web holes on web crippling capacity of rectangular hollow steel sections under two flange loadings 2024
Muhammad Amir Taimur Junaid Ahmad Sarmad Shakeel Muhammad Usman
Journal of Constructional Steel Research, Volume 222, Article Number 108985

Impact Factor: 4.000 | **Quartile:** 1
DOI: https://doi.org/10.1016/j.jcsr.2024.108985

Innovative valorization of biomass waste-derived sodium silicate for geopolymer concrete synthesis: Sustainability assessment and circular economy potential 2024

Muhammad Umer Junaid Ahmad Hina Mukhtar
Journal of Cleaner Production, Volume 452, Article Number 142181
Impact Factor: 11.100 | **Quartile:** 1 | **Citations:** 16
DOI: https://doi.org/10.1016/j.jclepro.2024.142181

High strength rubberized porous concrete for sustainable pavements: Engineering properties and life cycle assessment 2024

Musa Ajmal Khan Junaid Ahmad Hammad Anis Khan Muhammad Umer
Journal of Cleaner Production, Volume:451, Article Number: 142012
Impact Factor: 11.1 | **Quartile:** 1 | **Citations:** 3
DOI: 10.1016/j.jclepro.2024.142012

Optimisation of an alkali activator solution to enhance the performance of roller-compacted concrete for pavements (RCCP) 2024

Muhammad Jamman Shahid Hammad Anis Khan Musaad Zaheer Nazir Khan Junaid Ahmad Muhammad Abdullah
International Journal of Pavement Engineering, Volume 25, Issue 1, Article Number 2318609
Impact Factor: 3.8 | **Quartile:** 2 | **Citations:** 2
DOI: https://doi.org/10.1080/10298436.2024.2318609

Neural network-based models versus empirical models for the prediction of axial load-carrying capacities of FRP-reinforced circular concrete columns 2023

Shehroze Ali Junaid Ahmad Umair Iqbal Suliman Khan Muhammad N.S. Hadi
Structural Concrete , Vol: 2023, Pages: 17
Impact Factor: 3.2 | **Quartile:** 2 | **Citations:** 9
DOI: 10.1002/suco.202300420

Mechanical properties and life cycle assessment of sugarcane bagasse and corn cob ashes-based geopolymer concrete to promote circular economy 2023

Muhammad Umer Junaid Ahmad Muhammad Saleem Abdullah Hamas Ahmad Khan Shehroze Ali Muhammad Umair Younas
Structural Concrete , Volume:24, Issue:6, Pages:7482-7505
Impact Factor: 3.2 | **Quartile:** 2 | **Citations:** 14
DOI: https://doi.org/10.1002/suco.202300119

Predictive modelling of sustainable lightweight foamed concrete using machine learning novel approach 2022

Junaid Ahmad Haji Sami Ullah Rao Arsalan Khushnood Furqan Farooq
Journal of Building Engineering, Volume 56, Article Number 104746
Impact Factor: 7.144 | **Quartile:** 1 | **Citations:** 61
DOI: https://doi.org/10.1016/j.jobe.2022.104746

Prediction of Compressive Strength of Sustainable Foam Concrete Using Individual and Ensemble Machine Learning Approaches 2022

Haji Sami Ullah Rao Arsalan Khushnood Furqan Farooq Junaid Ahmad Nikolai Ivanovich Vatin Dina Yehia Zakaria Ewais
Materials , Volume 15, Issue 9, Article Number 3166
Impact Factor: 3.748 | **Quartile:** 1 | **Citations:** 60
DOI: https://doi.org/10.3390/ma15093166

Analytical load-moment (P-M) interaction diagrams of GFRP bar reinforced circular geopolymer concrete columns 2021

Shehroze Ali Junaid Ahmad M. Neaz Sheikh Tao Yu Muhammad N.S. Hadi
Structures , Volume 34, Pages 2445-2454
Impact Factor: 2.983 | **Quartile:** 2 | **Citations:** 9
DOI: https://doi.org/10.1016/j.istruc.2021.08.131

Analytical investigation on the load-moment interaction behavior of the FRP reinforced geopolymer concrete filled FRP tube circular columns 2021

Junaid Ahmad Shehroze Ali Tao Yu M. Neaz Sheikh Muhammad N.S. Hadi
Journal of Building Engineering, Volume 42, Article Number 102818
Impact Factor: 7.144 | **Quartile:** 1 | **Citations:** 26
DOI: https://doi.org/10.1016/j.jobe.2021.102818

Behavior of GFRP bar reinforced geopolymer concrete filled GFRP tube columns under different loading conditions 2021

Junaid Ahmad Tao Yu Muhammad N.S. Hadi

Structures , Volume 33, Pages 1633-1644

Impact Factor: 4.010 | **Quartile:** 2 | **Citations:** 25

DOI: https://doi.org/10.1016/j.istruc.2021.05.023

Investigation of BFRP bar reinforced geopolymer concrete filled BFRP tube columns 2021

Muhammad N.S. Hadi Junaid Ahmad Tao Yu

Proceedings of the Institution of Civil Engineers - Structures and Buildings, Pages 1-16

Impact Factor: 1.533 | **Quartile:** 4 | **Citations:** 19

DOI: https://doi.org/10.1680/jstbu.19.00227

Basalt Fiber-Reinforced Polymer-Confined Geopolymer Concrete 2021

Junaid Ahmad Tao Yu Muhammad N.S. Hadi

ACI Structural Journal, Volume 118(1), Pages 289-300

Impact Factor: 1.799 | **Quartile:** 3 | **Citations:** 17

DOI: 10.14359/51728094

Effect of 3D models on seismic vulnerability assessment of deficient RC frame structures 2018

Arslan Mushtaq Shaukat Ali Khan Junaid Ahmad M. Usman Ali

Australian Journal of Structural Engineering, NULL

Impact Factor: 0 | **Citations:** 6

DOI: 10.1080/13287982.2018.1480910

Seismic vulnerability assessment of strengthened Glass Fiber Reinforced Concrete (GFRC) 2017

Liaqat Ali Qureshi Junaid Ahmad Hammad Salahuddin

KSCE Journal of Civil Engineering, Volume: 21 Issue: 6 Pages: 2235-2244

Impact Factor: 0.94 | **Quartile:** 3 | **Citations:** 11

DOI: 10.1007/s12205-016-0819-4

Editorial Activities

Construction and Building Materials 2025
Reviewed Papers for Journals
Impact Factor: 7.4

Construction and Building Materials 2025
Reviewed Papers for Journals
Impact Factor: 7.4

Construction and Building Materials 2025
Reviewed Papers for Journals
Impact Factor: 7.4

Structures 2025
Reviewed Papers for Journals
Impact Factor: 3.9

Journal of Cleaner Production 2024
Reviewed Papers for Journals
Impact Factor: 11.1

Journal of Building Engineering 2023
Reviewed Papers for Journals
Impact Factor: 6.4

Archives of Civil and Mechanical Engineering 2023
Reviewed Papers for Journals
Impact Factor: 4.042

Structures 2023
Reviewed Papers for Journals
Impact Factor: 4.010

KSCE Journal of Civil Engineering 2023
Reviewed Papers for Journals
Impact Factor: 2.115

Structures 2022
Reviewed Papers for Journals
Impact Factor: 4.010

KSCE Journal of Civil Engineering 2022
Reviewed Papers for Journals
Impact Factor: 2.115

2022
Reviewed Papers for Journals
Impact Factor: 2.115

2022
Reviewed Papers for Journals
Impact Factor: 2.115

2021
Reviewed Papers for Journals
Impact Factor: 1.744