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EDUCATION

- **Ph.D. | Chulalongkorn University, Bangkok, Thailand (C2F scholarship)** **2020-2023**
Thesis: Strengthening of reinforced concrete members with lap splices using steel collars.
CGPA 4.00/4.00
- **Masters in Civil Engineering | Saitama University, Japan (MEXT scholarship)** **2016-2018**
Thesis: Extraction of modal characteristics of bridges from ambient vibrations by using Continuous Wavelet Transform and Eigensystem Realization Algorithm.
Grade A (88.0%)
- **Bachelors in Civil Engineering | University of Engineering and Technology, Taxila, Pakistan** **2012-2016**
Thesis: Strengthening of beam-column joints by using Carbon Fiber Reinforced Polymer sheets.
CGPA 3.86/4.00

RESEARCH INTERESTS

- Sustainable construction, eco-friendly concrete production
- Experimental testing of reinforced concrete members
- Strengthening of deficient reinforced concrete members
- Finite Element Modeling

EXPERIENCE

- **Assistant Professor | Structural Engineering Department | National University of Science and Technology, Pakistan** **January 2023-September 2025**
Supervised five master's students

Taught postgrad students the following subjects:

- *Finite Element Method* | Theory and MATLAB application
- *Advanced Structural Mechanics*
- *Structural Fire Engineering*

- **Lecturer | Capital University of Science and Technology, Islamabad, Pakistan**

September 2019-December 2019

Taught undergrad students the following subjects:

- Surveying
- Engineering Drawing
- Design of Reinforced Concrete

- **Lecturer | COMSATS University Islamabad, Pakistan**

March 2019-August 2019

Taught undergrad students the following subjects:

- Mechanics of Solids
- Matrix Analysis of Structures

PUBLICATIONS (SCI-indexed)

- **Ejaz A**, Ruangrassamee A, Jirawattanasomkul T, and Zhang D. Experimental and analytical investigations on enhancing compressive stress vs. strain response of square-section recycled brick aggregate concrete by steel clamps. *Case Studies in Construction Materials*. 2025: 22:e04645. (IF: 6.5)
- **Ejaz A**, Hanif M, Chatveera B, and Sua-iam G. Development of nano-calcium carbonate-modified green self-compacting concrete incorporating recycled tempered glass and waste cotton rope fibers. *Journal of Building Engineering*. 2025: 114765. (IF: 6.7)
- **Ejaz A**, Ruangrassamee A, Kruavit P, Udomworarat P, Wijeyewickrema AC,. Strengthening of substandard lap splices using hollow steel section (HSS) collars. *Structures*. 2022: Vol. 46, pp. 128-145. (IF: 3.9)
- Kruavit P, **Ejaz A***, Wijeyewickrema AC, Ruangrassamee A. Experimental and Numerical Investigations on Enhancing Ductility of Reinforced Concrete Columns with Substandard Lap Splices Using Hollow Steel Section Collars. *Journal of Earthquake Engineering*. 2025: 29(1):103-29. (IF: 2.5)
- Hanif, M. A, **Ejaz, A***, Rizwan, M, Bloach, M. A, & Iqbal, M. J. Experimental and Numerical Assessment of Bond Strength of Lap Spliced Steel Bars in Recycled Brick Aggregate Concrete. *Arabian Journal for Science and Engineering*. 2025: 1-20. (IF: 2.9)
- Saingam P, Gadagamma CK, Hussain Q, Hlaing HH, Suwannatrai R, Qureshi MI, **Ejaz A***. Modeling and comparative analysis of sustainable cotton rope confinement: Full vs. STrip wrapping for enhanced concrete strength and ductility. *Case Studies in Construction Materials*. 2025: 22:e04134. (IF: 6.5)

- Saingam P, Hussain Q, Sua-iam G, Nawaz A, **Ejaz A***. Hemp fiber-reinforced polymers composite jacketing technique for sustainable and environment-friendly concrete. *Polymers*. 2024: 16(13):1774. (IF: 4.7)
- Chatveera B, **Ejaz A**, Hanif MA, Saingam P, Hussain Q, Chintanapakdee C, Arreeras T, Sua-iam G. Synergistic effect of recycled E-waste fiber and polyvinyl alcohol on the properties of green concrete incorporating recycled concrete aggregate. *Developments in the Built Environment*. 2025: 100722.
- Htet PM, **Ejaz A**, Gadagamma CK, Hussain Q, Saingam P, Khaliq W, et al. Seismic Strengthening of Heritage Masonry Buildings Using Fiber-Reinforced Paint: Numerical Validation and Shake Table Testing for Enhanced Energy Dissipation and Safety. *Journal of Building Engineering*. 2025: 111824. (IF: 6.7)
- Yooprasertchai E, **Ejaz A**, Chatveera B, Sua-iam G, Hussain Q, Saingam P. Enhancing the flexural response of RC one-way slabs using low cost fiberglass chopped mat sheets and anchors. *Case Studies in Construction Materials*. 2025: 22:e04413. (IF: 6.5)
- Saingam P, **Ejaz A**, Gadagamma CK, Hussain Q, Sua-iam G, Chatveera B, et al. Innovative Approaches to RC Deep Beam Strengthening: Evaluating Low-Cost Glass Fiber Wraps Against Traditional CFRP Solutions. *Polymers*. 2025: 17(6):807. (IF: 4.7)
- Rodsin K, **Ejaz A**, Wang H, Saingam P, Joyklad P, Khaliq W, et al. Machine Learning and Regression Models for Evaluating Ultimate Performance of Cotton Rope-Confined Recycled Aggregate Concrete. *Buildings*. 2024: 15(1):64. (IF: 3.1)
- Rodsin K, **Ejaz A**, Hussain Q, Parichatprecha R. Experimental and Analytical Studies on Low-Cost Glass-Fiber-Reinforced-Polymer-Composite-Strengthened Reinforced Concrete Beams: A Comparison with Carbon/Sisal Fiber-Reinforced Polymers. *Polymers*. 2023: 15(19):4027. (IF: 4.7)
- Saingam P, **Ejaz A**, Ali N, Nawaz A, Hussain Q, Joyklad P. Prediction of stress–strain curves for HFRP composite confined brick aggregate concrete under axial load. *Polymers*. 2023: 15(4):844. (IF: 4.7)
- Suparp S, **Ejaz A**, Khan K, Hussain Q, Joyklad P, Saingam P. Load-bearing performance of non-prismatic RC beams wrapped with carbon FRP composites. *Sensors*. 2023: 23(12):5409. (IF: 3.4)
- Yooprasertchai E, **Ejaz A**, Saingam P, Ng AWM, Joyklad P. Development of stress-strain models for concrete columns externally strengthened with steel clamps. *Construction and Building Materials*. 2023: 377:131155. (IF: 7.4)
- Hussain Q, Ruangrassamee A, **Ejaz A**, Jirawattanasomkul T, Zhang D, Saingam P. Bond Strength of Lap Spliced Steel Bars in RC Beams Strengthened with Low-cost Natural FRP Composites: Experimental and Theoretical Study. *Case Studies in Construction Materials*. 2025: e04396. (IF: 6.5)
- Saingam P, Hussain Q, **Ejaz A**, Nawaz A, Joyklad P, Khan K. Enhancing compressive behavior of concrete with novel low-cost hybrid passive confinement including large rupture strain cotton ropes: Experimental findings and a design-oriented model. *Case Studies in Construction Materials*. 2024: 21:e03496. (IF: 6.5)
- Saingam P, Hussain Q, **Ejaz A**, Nawaz A, Joyklad P, Khan K. Corrigendum to ‘Enhancing compressive behavior of concrete with novel low-cost hybrid passive confinement including large rupture strain cotton ropes: Experimental findings and a design-oriented model. *Case Studies in Construction Materials*. 2024: 21:e03736. (IF: 6.5)

- Farooq U, Rizwan M, Khaliq W, **Ejaz A**, Saingam P, Hussain Q, et al. Towards sustainable construction: Harnessing potential of pumice powder for eco-friendly concrete, augmented by hybrid fiber integration to elevate concrete performance. *Case Studies in Construction Materials*. 2024; 21:e03815. (IF: 6.5)
- Nawaz A, Khan AM, Jirasakjamroonsri A, Saingam P, **Ejaz A**, Hussain Q, et al. Performance of Environmentally Friendly Concrete Containing Fly-Ash and Waste Face Mask Fibers. *Sustainability*. 2024; 16(23):10385. (IF: 3.3)
- Joyklad P, Gadagamma CK, Maneengamlert B, Nawaz A, **Ejaz A**, Hussain Q, et al. Structural behavior of RC one-way slabs strengthened with ferrocement and FRP composites. *Engineering Failure Analysis*. 2024; 161:108328. (IF: 4.4)
- Chaiyasarn K, Poovarodom N, **Ejaz A**, Ng AW, Hussain Q, Saingam P, et al. Influence of natural fiber rope wrapping techniques on the compressive response of recycled aggregate concrete circular columns. *Results in Engineering*. 2023; 19:101291. (IF: 6.0)
- Suparp S, Khan I, **Ejaz A**, Khan K, Weesakul U, Hussain Q, et al. Behavior of non-prismatic RC beams with conventional steel and green GFRP rebars for sustainable infrastructure. *Scientific Reports*. 2023; 13(1):15733. (IF: 3.8)
- Joyklad P, Waqas HA, Hafeez A, Ali N, **Ejaz A**, Hussain Q, et al. Experimental investigations of cement clay interlocking brick masonry structures strengthened with CFRP and cement-sand mortar. *Infrastructures*. 2023; 8(3):59. (IF: 2.7)
- Khan I, Khattak AW, Bahrami A, Khattak S, **Ejaz A**. Engineering characteristics of SBS/Nano-Silica-modified Hot Mix Asphalt mixtures and modeling techniques for rutting. *Buildings*. 2023; 13(9):2352. (IF: 3.1)
- Joyklad P, Saingam P, Ali N, **Ejaz A**, Hussain Q, Khan K, et al. Low-cost fiber chopped strand mat composites for compressive stress and strain enhancement of concrete made with brick waste aggregates. *Polymers*. 2022; 14(21):4714. (IF: 4.7)
- Saingam P, Chatveera B, Roopchalaem J, Hussain Q, **Ejaz A**, Khaliq W, et al. Influence of recycled electronic waste fiber on the mechanical and durability characteristics of eco-friendly self-consolidating mortar incorporating recycled glass aggregate. *Case Studies in Construction Materials*. 2025; e04369. (IF: 6.5)
- Thansirichaisree P, Hussain Q, Zhou M, **Ejaz A**, Talpur SA, Saingam P. Hybrid FRP strengthening of reinforced concrete deep beams: Experimental, theoretical and machine learning-based study. *Case Studies in Construction Materials*. 2025; 22:e04057. (IF: 6.5)
- Talpur SA, Thansirichaisree P, Anotaipaiboon W, Mohamad H, Zhou M, **Ejaz A**, et al. Data-driven prediction of failure loads in low-cost FRP-confined reinforced concrete beams. *Composites Part C: Open Access*. 2025; 17:100579. (IF: 5.3)
- Saingam P, Gadagamma CK, Hussain Q, **Ejaz A**, Hlaing HH, Suwannatrai R, et al. Large rupture strain cotton ropes hybridized with affordable fiberglass chopped strand mat sheets for enhanced compressive behavior of reinforced concrete columns. *Heliyon*. 2024; 10(21). (IF: 3.4)
- Thansirichaisree P, Mohamad H, **Ejaz A**, Saingam P, Hussain Q, Suparp S. Stress-strain behavior of square concrete columns confined with hybrid B-CSM composites and development of novel prediction models. *Composites Part C: Open Access*. 2024; 14:100448. (IF: 5.3)
- Thansirichaisree P, Mohamad H, Zhou M, **Ejaz A**, Saingam P, Hussain Q, et al. Hybrid B-CSM Composites Strengthening Approach for Improved Stress–Strain Behavior of

Concrete Columns and Development of Analytical Models. *Arabian Journal for Science and Engineering*. 2024: 1-23. (IF: 2.6)

- Yooprasertchai E, Khursheed A, Qureshi MI, **Ejaz A**, Hussain Q, Jirasakjamroonsri A, et al. Sustainable development of concrete through treated and untreated plastic waste aggregates. *Scientific Reports*. 2024: 14(1):22051. (IF: 3.8)
- Yooprasertchai E, Saingam P, Hussain Q, Khan K, **Ejaz A**, Suparp S. Development of stress-strain models for glass fiber reinforced polymer composites confined sustainable concrete made with natural and recycled aggregates. *Construction and Building Materials*. 2024: 416:135097. (IF: 7.4)
- Saingam P, Hlaing HH, Suwannatrai R, **Ejaz A**, Hussain Q, Khan K, et al. Enhancing the flexural behavior of brick masonry walls with ferrocement overlays and low-cost anchors. *Case Studies in Construction Materials*. 2023: 19:e02558. (IF: 6.5)
- Yooprasertchai E, Bahrami A, Saingam P, Hussain Q, **Ejaz A**, Joyklad P. Incorporation of steel fibers to enhance performance of sustainable concrete made with waste brick aggregates: experimental and regression-based approaches. *Buildings*. 2023: 13(11):2820. (IF: 3.1)

PUBLICATIONS (Non-SCI-indexed)

- Joyklad P, Chatveera B, **Ejaz A**, Saingam P, Makul N, Hussain Q, et al. Eco-Innovative Hollow Concrete Blocks with Diatomite and Sugarcane Bagasse Ash: Advancing Sustainability in Construction Material. *Engineered Science*. 2025.
- Thansirichaisree P, **Ejaz A**, Mohamad H, Saingam P, Chaimahawan P, Hussain Q. Enhancing Flexural Strength of Concrete Incorporating Natural and Recycled Brick Aggregates with Low-Cost Glass and Carbon Fiber-Reinforced Polymer. *Engineered Science*. 2025: 34:1384.
- Weesakul U, Htun TP, **Ejaz A**, Thansirichaisree P, Hussain Q. Mechanical Properties of Recycled Aggregate Concrete with Industrial Waste Ash. *Engineering, Technology & Applied Science Research*. 2024: 14(6):18042-7.
- Htun TP, Thansirichaisree P, Poovarodom N, **Ejaz A**, Hussain Q. MECHANICAL PROPERTIES OF ENVIRONMENTALLY FRIENDLY GREEN CONCRETE MADE WITH NATURAL AND RECYCLED FINE AGGREGATES. *GEOMATE Journal*. 2024: 27(120):146-53.
- Min A, Weesakul U, Thansirichaisree P, **Ejaz A**, Hussain Q. Development of sustainable concrete by using non-potable and sanitary water in Thailand. *GEOMATE Journal*. 2023: 25(112):32-9.
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SOFTWARE CAPABILITY

- MATLAB
 - Extensively used for programming Continuous Wavelet Transform and Eigensystem Realization Algorithm during master's work.
 - Used as a tool to program Finite Element Method during teaching.

- OpenSees
 - Extensively used during Ph.D. work, especially for nonlinear regression and performing an iterative solution strategy to develop compressive stress-strain behavior of hollow steel section collar-confined concrete.
 - Performed nonlinear fiber-based analysis of reinforced concrete members with substandard lap splices (Ph.D. work).
 - Performed nonlinear fiber-based analysis of hollow steel section collar-confined reinforced concrete members with substandard lap splices (Ph.D. work).
 - Tcl
 - Performed programming by using Tcl to run OpenSees routines (Ph.D. work).
 - Python
 - Performed programming by using Python to run OpenSees routines (Ph.D. work).
 - ETABS
 - Design of reinforced concrete buildings (during bachelors).
 - SAP2000
 - Analysis and design of complex structures
 - Response2D
 - Performed moment-curvature analysis of reinforced concrete sections.
 - IBM SPSS Statistics
 - Performed linear and nonlinear regression analysis.
 - AutoCAD 2D-3D
 - Extensively used for geometric modeling.
 - Origin Pro
 - Extensively used for plotting graphs.
 - Sketchup
 - Used for 3D sketching of reinforced concrete, test setup, etc.
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REFERENCES

1. Prof. Yasunao Matsumoto, Ph.D.

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2. Prof. Anat Ruangrassamee, Ph.D.

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LINKS TO WEBSITES

- Google Scholar
<https://scholar.google.com/citations?user=GibSyK8AAAAJ&hl=en>
- LinkedIn
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