

MOUSSA LEBLOUBA

39 years old, Algerian citizen.

Marital status: married with 03 children.

e-mail: mleblouba@sharjah.ac.ae

University of Sharjah, Department of Civil & Environmental Engineering

College of Engineering, Sharjah, P. O. BOX 27272, United Arab Emirates

Tel. Ext. 2925

Education

- 2014 ECOLE NATIONALE SUPERIEURE DES TRAVAUX PUBLICS (ENSTP), ALGIERS, ALGERIA
University Habilitation in Civil Engineering
- 2009 TECHNICAL UNIVERSITY OF CIVIL ENGINEERING, BUCHAREST, ROMANIA(EU)
Doctor of Philosophy in Civil Engineering
- 2005 ECOLE NATIONALE SUPERIEURE DES TRAVAUX PUBLICS (ENSTP), ALGIERS, ALGERIA
Degree of Ingenieur (ranked #1)

Academic Positions

- 2018-Pres. Associate Professor, Department of Civil and Environmental Engineering, College of Engineering, University of Sharjah.
- 2014-2018 Assistant Professor, Department of Civil and Environmental Engineering, College of Engineering, University of Sharjah.
- 2013-2014 Assistant Professor, High National School of Public Works, Algiers, Algeria.
- 2012-2013 Lecturer, Curtin University, Sarawak Campus.
- 2010-2011 Assistant Professor, High National School of Public Works, Algiers, Algeria.

Teaching Activities

Courses taught at the University of Sharjah: (Undergraduate (U)/ Graduate (G))

Course	Semester
Dynamics (U)/Statics (U)	Fall 2014-2015
Dynamics (U)	Spring 2014-2015
Senior design project I (U)	
Senior design project II (U)	
Advanced Numerical Methods (G)	
Dynamics (U)	Summer 2014-2015
Dynamics (U)	Fall 2015-2016
Senior design project I (U)	
Senior design project II (U)	
Structural Dynamics and Earthquake Engineering (G)	
Dynamics (U)	Spring 2015-2016
Senior design project I (U)	
Senior design project II (U)	
Dynamics (U)	Summer 2015-2016
Statics (U)	Fall 2016-2017
Dynamics (U)	
Dynamics (U)	Spring 2016-2017
Senior design project I (U)	
Senior design project II (U)	
Structural Dynamics and Earthquake Engineering (G)	
Dynamics of Structures (U)	Fall 2017-2018
Dynamics (U)	
Finite Element Method (G)	
Senior design project II (U)	
Dynamics (U)	Spring 2017-2018
Advanced Numerical Methods (G)	
Senior design project I (U)	
Senior design project II (U)	
Dynamics (U)	Fall 2018-2019
Dynamics of Structures (U)	
Senior design project I (U)	
Senior design project II (U)	
Advanced Structural Analysis and Design (U)	Spring 2018-2019
Dynamics (U)	
Senior design project I (U)	
Senior design project II (U)	
Dynamics (U)	Fall 2019-2020
Advanced Numerical Methods (G)	
Senior design project I (U)	
Senior design project II (U)	
Dynamics (U)	Spring 2019-2020
Advanced Numerical Methods (G)	
Senior design project I (U)	
Senior design project II (U)	

Courses taught at Curtin University, Sarawak Campus

Course	Semester
Structural Analysis 365 (Lecture)	S1 2012-2013
Structural Analysis 365 (Lab)	
Structural Analysis 267 (Lecture)	
Structural Analysis 267 (Tutorial)	
Structural Design 266 (Lecture)	S2 2012-2013
Structural Mechanics (Lecture)	
Engineering Mechanics 100 (Tutorial)	
Structural Analysis 365 (Lecture)	S1 2013-2014
Structural Analysis 365 (Lab)	
Civil Engineering Materials 267 (Lecture)	
Civil Engineering Materials 267 (Lab)	

Students Supervision

Registered **Supervisor level 1** of Doctoral and Masters students (eligible to supervise students in the capacity of Supervisor) in the Register of Supervisors by Curtin University, Australia since 2013.

- MSc Experimental Study on the Shear Strength of Reinforced Concrete (RC) Beams Strengthened with Externally U-Bonded Carbon Fiber Reinforced Polymer (EB-FRP), Basil Ayman Kamel Ibrahim, (2018), @ University of Sharjah, Joint supervision, **Completed**.
- MPhil An Analytical and Experimental Investigation of Polycal Wire Rope Vibration Isolators for Industrial Equipment, Ting Yuk Shyh, (2016), @ Curtin University, Joint supervision, **Completed**.
- MSc Stability Analysis of Thin-Walled Steel Multi-Column Bundles, Saif Uddin M. Al-Khaled, (2017), @ University of Sharjah, Joint supervision, **Completed**.
- MSc Dynamic Behavior of the Connection Girder-Shear Connector-Deck of Reinforced Concrete Bridges: An Experimental Study, Mohammed Siraj Aldeen, (2017), @ University of Sharjah, Joint supervision, **Completed**.
- MSc Control of Wind-Induced Motions in Tall Buildings-Performance and Cost-Efficient Solutions, Anas Mustapha Cherkaoui, (2016), @ University of Sharjah, Joint supervision, **Completed**.
- MSc Optimization of the Seismic Performance of Frames with Engineered Cementitious Composites, Abdulrahman Mustafa, (2016), @ University of Sharjah, **Completed**.
- MSc One-dimensional Dynamic Nonlinear Site Response Analysis: Sharjah City Case Study, Baroud Mohammed (2015), @ University of Sharjah, **Completed**.
- PhD An Analytical and Experimental Study on Wire Rope Isolators for Vibration Isolation of Equipment and Structures, Balaji Palani Selvaraj, @ Curtin University (2013-2017), Joint supervision, **Completed**.
- PhD Static and Dynamic Behavior of a Class of Shock and Vibration Mounts, Benyoucef Abdelkader (2012), @ ENSTP, Joint supervision, **Completed**.
- PhD Performance-Based Seismic Design Procedures and Seismic Isolation Techniques for the Future Algerian Seismic Code, Cheikh Banazouz (2010-2013), @ ENSTP, **Completed**.

MSc Evaluation of the Seismic Performance of Reinforced Concrete bridges, Bentamoune Naceddine (2011), @ ENSTP, **Completed**.

Research Group

Currently, a member of the **Sustainable Construction Materials And Structural Systems** research group.

Research Interests

Linear/Nonlinear Static/Dynamic analysis of structures and structural systems.

Buckling of thin-walled structures.

Performance of Engineered construction materials.

Behavior of Seismic isolation systems and seismically isolated structures.

Passive and active control of structures.

Performance-Based Seismic Design (PBSD) for ordinary, base isolated, and high rise buildings.

Soil-Foundation-Structure Interaction (SFSI).

Research Projects: Submitted, Completed, and Current

Experimental Study on the Shear Strength of Externally Bonded Carbon Fiber Reinforced Polymer (EB-FRP) Reinforced Concrete (RC) Beams, **Competitive research grant**, University of Sharjah, Amount: 80,000 AED (**05/2018-Current**).

Restrained Shrinkage and Cracking Behaviour of Ambient Cured Geopolymer Concrete, **Competitive research grant**, University of Sharjah, Amount: 69,100 AED (**2017-Current**).

Estimation of Earthquake Hazard in Sharjah, **Targeted Research Grant**, University of Sharjah, Amount: 199,600 AED (**11/2016-Current**).

Polycal Wire Rope Vibration Isolator for Industrial Equipment- A Mathematical Model, **FRGS**, Malaysian Ministry of Higher Education, Amount: 50,000 RM (**2015-Current**).

Investigation on the behavior and performance of wire rope isolators, **SEED fund**, University of Sharjah, Amount: 20,000 AED (**2015-Completed: 6 Journal papers + 4 Conference articles**).

Innovative vibration attenuation devices for equipment and structures, University of Sharjah, Amount: 48,000 AED, **Competitive research grant** (**6/2015-Completed**).

Rapid strengthening of unreinforced masonry walls for out-of-plane action using fiber reinforced shotcrete, University of Sharjah, Amount: 60,000 AED, **Competitive research grant** (**6/2016-Current**).

Experimental study on shear strength of trapezoidal corrugated steel webs, University of Sharjah, Amount: 60,000 AED, **Competitive research grant** (**9/2015-Completed 7 Journal paper + 1 Conference article**).

Innovative Vibration Isolation Systems for Equipment and Structures, **ERGS**, Malaysian Ministry of Higher Education, Amount: 50,000 RM (**2012-Completed: 1 PhD, 4 Journal papers + 3 Conference articles**).

A Study on the Performance of Cold-Formed Steel Built-Up I Sections, **Ecosteel Company**, Malaysia, Amount: 137,000 RM. (**2012-Completed**).

Developing a Building Information Model (BIM) for Virtual and Simulated Engagement in Building Design and Construction, **eScholar Program** 2013, Curtin Australia, Australia, Amount: 10,000 AU\$ (2013-Completed).

Nonlinear Macro-element Formulation for Lead-Rubber Bearings, **Curtin Sarawak Research Fund**, Malaysia, Amount: 10,000 RM. (2012-Completed).

Innovative vibration isolation systems for equipment and structures, **Curtin Sarawak Collaborative Research**, Malaysia, Amount: 10,000 RM. (2013-Completed: 1 Conference article).

Earthquake Engineering and Structural Dynamics Educational Tools for Undergraduate and Graduate Students, **University Research Project** (J040502010002), Algeria, Amount: 48,500 US\$ (2011-Completed).

Research Submissions

2020 **M.T. Junaid, A. Karzad, M. Leblouba**, 2020, "Properties of Ambient Cured Alkali Activated Binder Concrete", *Advances in Cement Research*, **ICE Publishing**, Under review

Journal Publications

M. Leblouba, Sami W. Tabsh, 2020, "Reliability-based shear design of corrugated web steel beams for AISC 360 specification and CSA-S16 standard", *Engineering Structures*, Elsevier, Accepted, <https://authors.elsevier.com/tracking/article/details.do?aid=110617&jid=JEST&surname=Leblouba>

M. Leblouba, Sami W. Tabsh, Samer B., 2020, "Reliability-based design of corrugated web girders in shear as per AASHTO LRFD", *Journal of Constructional Steel Research*, Elsevier, <https://doi.org/10.1016/j.jcsr.2020.106013>

M. Leblouba, Samer B., Mohammed SA. Ahmed, Salah A., 2019, "Shear strength at the interface of precast bridge concrete decks and girders subjected to cyclic loading with varying speeds ", *Engineering Structures*, Elsevier, <https://doi.org/10.1016/j.engstruct.2019.109296>

Abdul Saboor K., **M. Leblouba**, Salah A., Momahed M., 2019, "Repair and strengthening of shear-deficient reinforced concrete beams using Carbon Fiber Reinforced Polymer", *Composite Structures*, Elsevier, <https://doi.org/10.1016/j.compstruct.2019.110963>

M. Leblouba, Muhammad E. R., Samer B., 2019, "Behavior of polycal wire rope isolators subjected to large lateral deformations", *Engineering Structures*, Elsevier, <https://doi.org/10.1016/j.engstruct.2019.04.039>

M. Leblouba, Samer B., Mohamed M. Abdul Saboor K., 2019, "Normalized shear strength of trapezoidal corrugated steel webs: Improved modeling and uncertainty propagation", *Thin-Walled Structures*, Elsevier, <https://doi.org/10.1016/j.tws.2018.12.034>

Samer B., **Salah A., M. Leblouba**, Alburai E., 2019, "Trends of Shear Strengthened Reinforced Concrete Beams with Externally Bonded Fiber-Reinforced Polymer", *Structural Engineering and Mechanics*, 69(5), 579-589, DOI: <http://dx.doi.org/10.12989/sem.2019.69.5.579>

M. Leblouba, Samer B., Zaid S., 2018, "Shear behavior of corrugated web panels and sensitivity analysis", *Journal of Constructional Steel Research*, Elsevier, <https://doi.org/10.1016/j.jcsr.2018.09.010>

Samer B., **M. Leblouba**, 2018, "Experimental and Analytical Study on the Shear Strength of Corrugated Web Steel Beams", *Steel and Composite Structures*, 28(2), 256-266, DOI: [10.12989/scs.2018.28.2.251](https://doi.org/10.12989/scs.2018.28.2.251)

M. Leblouba, Samer B., Salah A., Talha M., Mohamed M., 2017, "Normalized shear strength of trapezoidal corrugated steel webs", *Journal of Constructional Steel Research*, Elsevier, <https://doi.org/10.1016/j.jcsr.2017.05.007>

- B. Chikh , N. Laouami, A. Mebarki, **M. Leblouba**, Mehani Youcef, Kibboua Abderrahmane, Hadid Mohamed, Benouar Djillali, 2017, “Seismic structural demands and inelastic deformation ratios: Sensitivity analysis and simplified models”, *Earthquakes and Structures*, DOI: 10.12989/eas.2017.13.1.059
- B. Chikh, A. Mebarki, N. Laouami, **M. Leblouba**, Y. Mehani, M. Hadid, A. Kibboua, and D. Benouar, 2017, “Seismic structural demands and inelastic deformation ratios: a theoretical approach”, *Earthquakes and Structures*, 12(4), Techno-press, DOI: 10.12989/eas.2017.12.4.397
- Abdelkader B., **M. Leblouba**, Ali Z., 2017, “Stiffness and Energy Dissipation of Oval Leaf Spring Mounts under Unidirectional Line Loading”, *Mechanics and Industry*, 18(4), <https://doi.org/10.1051/meca/2017012>
- Salah A., Talha M., **M. Leblouba**, Deena B., 2017, “Effectiveness of fly ash on the restrained shrinkage cracking resistance of self-compacting concrete”, *Cement and Concrete Composites*, Elsevier, <http://dx.doi.org/10.1016/j.cemconcomp.2017.01.010>
- M. Leblouba**, Talha M., Samer B., Salah A., Mohamed M., 2017, “Shear Buckling and Stress Distribution in Trapezoidal Web Corrugated Steel Beams”, *Thin Walled Structures*, Elsevier, <http://dx.doi.org/10.1016/j.tws.2017.01.002>
- M. Leblouba**, M. Maalej., and Salah A., 2016, “Engineering Cementitious Composites for Improved Crack-Width Control of FRC Beams – A Review”, *ACI-Special Publication*
- Salah A., Deena B., Talha M., **M. Leblouba**, 2016, “Restrained shrinkage behavior of Self-Compacting Concrete containing ground-granulated blast-furnace slag”, *Construction and Building Materials*, Elsevier, <http://dx.doi.org/10.1016/j.conbuildmat.2016.10.115>
- B Chikh, Y Mehani, **M. Leblouba**, 2016, “Simplified procedure for seismic demands assessment of structures”, *Structural Engineering and Mechanics*, 10.12989/sem.2016.59.3.455
- M. Leblouba**, Salah A., Muhammad E.R., Omer M., 2016, “Practical Soil-Shallow Foundation Model for Nonlinear Structural Analysis”, *Mathematical Problems in Engineering*, doi:10.1155/2016/4514152
- Balaji P.S. **M. Leblouba**, Muhammad E.R., Lau Ho, 2015, “An analytical study on the static vertical stiffness of wire rope isolators”, *Journal of Mechanical Science and Technology*, Springer, doi:10.1007/s12206-015-1232-5
- Balaji P.S. **M. Leblouba**, Muhammad E.R., Lau Ho, 2015, “Static lateral stiffness of wire rope isolators”, *Mechanics Based Design of Structures and Machines*, Taylor and Francis, <http://dx.doi.org/10.1080/15397734.2015.1116996>
- M. Leblouba**, A. Salah, M.E. Rahman, and P.S. Balaji, 2015, “Elliptical Leaf Spring Shock and Vibration Mounts with Enhanced Damping and Energy Dissipation Capabilities Using Lead Spring”, *Shock and Vibration*, doi:10.1155/2015/482063.
- P.S. Balaji, **M. Leblouba**, M.E. Rahman, and L. T. Vuia, 2015, “Experimental investigation on the hysteresis behavior of the wire rope isolators,” *Journal of Mechanical Science and Technology*, Springer, doi:10.1007/s12206-015-0325-5
- P. Balaji, M. Rahman, **M. Leblouba**, and H. Lau, 2015, “Wire rope isolators for vibration isolation of equipment and structures–A review,” *Materials Science and Engineering*, doi:10.1088/1757-899X/78/1/012001, IOP
- Brabha H.N., A. Faheem, M.E. Rahman, M. Mannan, **M. Leblouba**, 2015, “Mechanical and durability properties of medium strength self compacting concrete with high-volume fly ash and blended aggregates”, *Period. Polytech. Civil Eng.*, doi:10.3311/PPci.7144
- Muhammad E.R., **M. Leblouba**, V. Pakrashi 2014, “Improvement of Engineering Properties of Peat with Palm Oil Clinker”, *Pertanika J. Sci. & Technol.*, 22(2): 627-636.
- B. Chikh, **M. Leblouba**, and Zerzour Ali, 2012, “Ductility and inelastic deformation demands of structures”, *Structural Engineering and Mechanics*, 10.12989/sem.2012.42.5.631.

M. Leblouba, 2012, “Response Spectrum Analysis for Regular Base Isolated Buildings Subjected to Near Fault Ground Motions”, *Structural Engineering and Mechanics*, <http://dx.doi.org/10.12989/sem.2012.43.4.527>.

M. Leblouba, 2010, “Approximate earthquake analysis for regular base isolated buildings subjected to near fault ground motions”, *Lecture Notes in Engineering and Computer Science*, 2184 (1): 1654-1665.

M. Leblouba, 2009, “Improved procedures for performance-based seismic design of base isolated structures”, *Scientific Journal Mathematical Modeling in Civil Engineering*, 5(3): 51-68.

Conference Proceedings

Samer B., **M. Leblouba**, 2018, “Shear Strength of Corrugated Web Steel Beams: Experimental and Analytical Investigation”, *Transportation Research Board 97th Annual Meeting*, Transportation Research Board, 2018-1-7 to 2018-1-11, Washington DC, USA

PS Balaji, **M. Leblouba**, Ting Yuk Shyh Noman Khandoker, ME Rahman, Lau Hieng Ho., 2017, “Experimental study on vertical static stiffnesses of polycal wire rope isolators”, *IOP Conf. Series: Materials Science and Engineering*

M. Leblouba, S. Barakat, 2017, “Performance of Wire Rope Isolators in the Seismic Protection of Equipment”, *Proceedings of the International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17) Sharjah*, United Arab Emirates, April 18–20, 2017

P.S.Balaji, **M. Leblouba**, M.E.Rahaman, P. L. Y. Tiong, Lau Hieng Ho, and A. Adnan, 2016, “Performance Study of Wire Rope Isolators for Vibration Isolation Equipment and Structures”, *Proceedings of the 2nd International Conference on Design, Analysis, Manufacturing and Simulation (ICDAMS-2016)*, April 07-08, 2016, Chennai, India

Salah A., **M. Leblouba**, Deena B., 2015, “Shrinkage Cracking of Self Compacting Concrete (SCC) with Supplementary Cementitious Materials”, *Proceedings of the 2nd R.N. Raikar International Conference and Banthia-Basheer International Symposium on Advances in Science and Technology of Concrete*, 18-19 December 2015, Mumbai, India

M. Leblouba, 2015, “Using computer algebra systems in teaching structural analysis and design optimization”, *7th international forum on Engineering Education (IFEE 2015)*, 17-19 March, 2015, Sharjah

P.S.Balaji, M.E.Rahaman, **M. Leblouba**, and Lau Hieng Ho, 2015, “Vibration isolation of structures and equipment using Wire rope isolators”, *4th International Conference on Recent Trends in Engineering & Technology (ICRTET 2015)*, 2-5 July 2015, Nashik, India

B. Chikh, **M. Leblouba**, M. Youcef, and K. Abderrahmane, 2015, “Improved procedure for design and evaluation of structures: multi-degree-of-freedom systems”, *International Conference on Innovations in Civil and Structural Engineering (ICICSE'15)*, June 3-4, 2015, Istanbul, Turkey

B. Chikh, **M. Leblouba**, Y. Mehani, A. Zerzour, H. Bechtoula¹ and A. Benyoucef, 2013, “Improved Procedure For Design and Evaluation of Structures: Single-degree-of-freedom Bilinear Systems” *COMPADYN 2013*, Kos Island, Greece, 12–14 June 2013.

M. Leblouba and Muhammad E. R., 2012, “Computation of Vibration Properties of Base Isolated Structures”, *Proceeding of the 2012 CUTSE conference*, Miri, Malaysia, 6-7 November 2012.

Benazouz Cheikh, **M. Leblouba**, Ali Zerzour, Youcef Mehani, 2012, “Estimation of The Ductility and Inelastic Deformation Demands of Structures”, *Proceeding of the 2012 CUTSE conference*, Miri, Malaysia, 6-7 November 2012.

M. Leblouba, 2012, “Macro-Element Model for Nonlinear Cyclic Behavior of Shallow Foundations”, *Proceedings of the 15th World Conference on Earthquake Engineering (WCEE)*, Lisbon, Portugal, 24-28 September 2012.

Benazouz Cheikh, **M. Leblouba**, Ali Zerzour, Youcef Mehani, 2012, “Inelastic Response and Ductility Demand of Structures”, *Proceedings of the 15th World Conference on Earthquake Engineering (WCEE)*, Lisbon, Portugal, 24-28 September 2012.

M. Leblouba, Rahman M. E., Cheikh Benazouz, and Benyoucef Abdelkader, 2012, “Nonlinear Model for Lead Rubber Bearings Including Axial Load Effects”, ICCEA 2012, International Conference on Civil Engineering & Architecture, 3-4 August, Hong Kong (selected for ISI journal publication).

Rahman M. E., Montohar A., **M. Leblouba**, and Attapathu, 2012, “The Effect of Vegetation on Slope Stability”, ICCEA 2012, International Conference on Civil Engineering & Architecture, 3-4 August, Hong Kong.

M. Leblouba, Zerzour A., 2010, “Approximate Earthquake Analysis for Regular Base Isolated Buildings Subjected to Near Fault Ground Motions” WCE2010, Imperial College, London, UK.

M. Leblouba, Marioua A, 2009, “Estimating the Seismic Response of Base Isolated Buildings through a Response Spectrum Analysis” COMPDYN 2009, Rhodes, Greece.

M. Leblouba, 2007, “Effects of Some Parameters on the Seismic Response of Base Isolated Buildings” 6th International Conference of PhD Students, Hungary.

M. Leblouba, 2007, “Combined Systems for Seismic Protection of Buildings” International Symposium on Strong Vrancea Earthquakes and Risk Mitigation, 2007 Bucharest, Romania.

Technical Reports

Management of Research Projects, Report No.1/2006, Faculty of Civil Engineering, TUCB, 2006

Simulation in Earthquake Engineering Physical Models for Shake Table Tests, Report No.2/2007, Faculty of Civil Engineering, TUCB, 2007.

Design of Base Isolated Buildings, Philosophy of Proposed Procedures and Existing Design Codes, Report No.3/2007, Faculty of Civil Engineering, TUCB, 2007

Seismic Risk Reduction by Means of Base Isolation System-Nonlinear Dynamic Modeling for Base Isolated Buildings, Report No.4/2007, Faculty of Civil Engineering, TUCB, 2007

Earthquake Engineering, Report No.5/2007, Faculty of Civil Engineering, TUCB, 2007 – Structural Reliability Analysis, Report No.6/2007, Faculty of Civil Engineering, TUCB, 2007

Seismic Protection of Structures by Means of Seismic Isolation and Dampers , Report No.7/2007, Faculty of Civil Engineering, TUCB, 2007

Overview on the Seismic Isolation and Isolation Devices-Bibliographical Research, Report No.1/2008, Faculty of Civil Engineering, TUCB, 2008

Parametric Dynamic Analysis and Computer Simulations, Report No.2/2008, Faculty of Civil Engineering, TUCB, 2008

Guidelines for the Selection and Design of Base Isolation Systems, Report No.3/2009, Faculty of Civil Engineering, TUCB, 2009.

Developed Computer Programs

Building-TLD: Computer Program for Nonlinear Time History Analysis of Inelastic Buildings equipped with Tuned Liquid Dampers (2017);

DynaNL: Computer Program for Nonlinear Time History Analysis of Soil Response Including Soil Degradation (2015);

DYNANonlinMDF: Computer Program for Nonlinear Time History Analysis of Multi-Degree of Freedom Systems Including Material Degradation (2015);

CA-SAP: Educational Computer Program for Symbolic Structural Analysis and Design Optimization (2015);

PUSHit: Computer Program for Nonlinear Static Analysis of 2D Structures (Equivalent to the static version of IDARC2D developed by Reinhorn et al. at UNY at Buffalo);

SIZE: (SDF, 2D, 3D): Computer Programs for Analysis and Design of Base Isolated Structures (from Single Degree of Freedom Systems to 3D Multistory Structures);

RSA-BI: Computer Program for Response Spectrum Analysis of Base Isolated Structures, using a method developed during my doctoral studies;

AMA-BI: Computer Program for Approximate Earthquake Modal Analysis of Base Isolated Structures, using a method developed during my doctoral studies;

SIRS: Computer Program for Construction of a Response Spectrum especially for Base Isolated Structures, using a procedure developed during my doctoral studies;

DYNAlin: Computer Program for Linear Time History Analysis of Multi-Degree of Freedom Systems;

DYNAonlin: Computer Program for Nonlinear Time History Analysis of Single Degree of Freedom Systems;

Duct-Spec: Computer Program for Generating Ductility-Demand Spectra for a given ensemble of Ground Motions;

ISOL: Computer Program for simulating the nonlinear behavior of rubber and elastomericbased seismic isolators under combined loading cases.

SSI-F: Computer Program for simulating the nonlinear behavior of Soil-Shallow Foundation under combined loading cases (Quasi-Static, Material Degrading included).

Other special purpose computer programs.

Professional Development

- Receptient of the 2017 **Sharjah Islamic Bank Award for Outstanding Research**
- Certificate in *Leadership in Higher Education*, University of Sharjah, 2015.
- Certificate in *Foundation of Learning and Teaching (FOLT)*, Curtin University, Sarawak Campus, 2012.
- Registered in the Register of Supervisors as **Supervisor Level 1** of **Doctoral** and **Masters** students from Curtin University, Perth, Australia, 2013

Services Activities for The University of Sharjah and Community

- Member of the CubeSat university committee.
- CEE Department's ABET committee member.
- Member of the CEE Department Council.
- Member of the CEE Department website committee.
- Member of the CEE Department graduate studies and program assessment committee.
- Member of the CEE Department Senior Design Project committee.
- Member of the CEE Department technical seminars committee.
- Member of the College of Engineering committee for the Comunity Service.
- Member of MSc in Aerospace Engineering Program committee - New program development.

- Member of the scientific committee of IFEE2015.
- Member of the ASCMCES-17 Conference organizing committee.
- Reviewer for IFEE2015, IFEE2017, and ASCMCES-17.
- Session chair at the World Congress on Engineering, Imperial College, UK, 2010.

Review Services

I have reviewed many papers for the following journals:

- Engineering Structures, Elsevier (receptient of the certificate of outstanding contribution in reviewing, 2017)
- Cement and Concrete Composites, Elsevier
- ASTM journal of Testing and Evaluation, ASTM
- Structures and Buildings, Institute of Civil Engineers, UK
- Earthquakes and Structures, Techno-Press
- Steel and Composite Structures, Techno-Press

Affiliations

International Association of Engineers (IAEng)

IAENG Society of Mechanical Engineering

IAENG Society of Software Engineering

Languages

Arabic, English, French, and Romanian.