

Curriculum Vitae

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Education:

- Ph.D. Structural Engineering, University of Colorado at Boulder, 1999
- M.Sc. Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan, 1988
- B.Sc. Civil Engineering, Yarmouk University, Irbid, Jordan, 1985

Experience:

- Head of Civil and Environmental Engineering Department, School of Natural Resources Engineering and Management, German Jordanian University, Amman, Jordan (Sept. 22-present)
- Assistant Dean for Accreditation and quality assurance, School of Natural Resources Engineering and Management, German Jordanian University, Amman, Jordan (Nov. 21-present)
- Associate Professor, Civil and Environmental Engineering Department, German Jordan University, Amman, Jordan (Feb 2020 – Present).
- Associate Professor, Building Engineering Department, Imam Abdulrahman Bin Faisal University, Al-Dammam, Saudi Arabia (June 2018 – Feb 2020).
- Associate Professor, Civil and Environmental Engineering Department, Mutah University, Karak, Jordan, Sabbatical Leave, (September 2017-June 2018)
- Associate Professor, Building Engineering Department, Dammam University, Al-Dammam, Saudi Arabia (Feb 2014 – September 2017).
- Head of Civil and Environmental Engineering Department, Mutah University, Mutah, Karak, Jordan (Sept 2013 – Feb 2014).
- Associate Professor, Civil Engineering Department, Mutah University, Mutah, Karak, Jordan (Feb 2012 – Feb 2014).
- Associate Professor, Civil Engineering Department, King Faisal University, Al-Hassa, Saudi Arabia (Aug 2007– Feb 2012).

- Program Coordinator, Civil Engineering Department, King Faisal University, Saudi Arabia, (August 2007 – August 2011)
- Associate Professor, Civil Engineering Department, Mutah University, Mutah, Karak, Jordan (Aug 2005 – Aug 2007).
- Head of Civil and Environmental Engineering Department, Mutah University, Mutah, Karak, Jordan (Sept 2005 – Sept 2007).
- Assistance Dean of Engineering for Students and Training, Mutah University, Mutah, Karak, Jordan (Sept 2004 – Sept 2005).
- Assistant Professor, Civil Engineering Department, Mutah University, Mutah, Karak, Jordan (Aug 2000 – Aug 2005).
- Teaching and research assistant, University of Colorado at Boulder, Boulder, Colorado (1996-2000).
- Construction Engineer, United Enterprises Company, Amman, Jordan (1991-1994).
- Consultant Engineer, Jordanian Corps of Engineers, Jordan (1989-1991).
- Supervisor of Engineering Computer, Jordan University of Science and Technology, Irbid, Jordan (1987-1989).
- Teaching and research assistant, Jordan University of Science and Technology, Irbid, Jordan (1985-1987).

MEMBERSHIP

- Member of *IABMAS*, International Association for Bridge Maintenance and Safety
- Member of *JEA*, Jordan Engineers Association, Civil Sector.

AWARDS

- Sanabel El Hassad Award for Community Service, 2015, for participating in Sustainable House Initiative.
- State-of-the-Art of Civil Engineering Award, American Society of Civil Engineers, 2004, for participating in the production of the report “*Recent Advances in Optimal Structural Design,*” edited by Scott A. Burns and published by ASCE, 2002, ISBN No. 0-7844-0636-7.

COURSES TAUGHT

Master Level Courses:

- Management Information Systems
- Advanced Probability and Statistics
- Numerical methods (Master Level)
- Mathematical Modeling
- Advanced Theory of Structures
- Structural Dynamics

Undergraduate Level Courses:

- Structural Analysis-1
- Structural Analysis-2
- Advanced Structural Analysis
- Design of Steel Structures
- Reinforced Concrete Design -1
- Reinforced Concrete Design -2
- Computers in Civil Engineering
- Bridge Engineering
- Computer Skills-2 (Visual Basic)
- Surveying and GPS
- Engineering Drawing
- Descriptive Geometry
- Engineering Drawing Using Computers (AUTOCAD)
- Engineering Mechanics (Statics)
- Engineering Economy
- Strength of Materials
- Concept of Structures
- Construction Systems and Materials
- Design Studio (Special Structures)
- Design Studio (BIM Modeling)
- Design Studio (Integrated Design Project)
- Construction Systems II (Special Construction Systems)
- Engineering Projects & Construction Management
- Contracts, Specifications and Quantity Surveying
- Engineering Economy
- Computation in surveying (Diploma level)

SKILLS:

- International Computer Driving License, ICDL, UN#: UN 04057075
- Computer Applications, AUTOCAD, ABAQUS, STAAD Pro, SAP
- Computer Programming using FORTRAN and VISUAL BASIC, Excel

PUBLICATIONS

- Mohammad M. Hamed, Dima M. Kabtawi, Adel Al-Assaf, Omar Albatayneh, **Emhaidy S. Gharaibeh**. (2023) "Random parameters modeling of charging-power demand for the optimal location of electric vehicle charge facilities", Journal of Cleaner Production, Volume 388, ISSN 0959-6526, <https://doi.org/10.1016/j.jclepro.2023.136022>.
- Alshabibi, N., **Gharaibeh, E.**, and Elhadi, E., "(2023). "Identifying the Causes and Types of Accidents Associated with the Spatial Distribution of Black Spots in the Region of Dammam Metropolitan Area, Saudi Arabia," SAE Int. J. Trans. Safety Vol. 11, No. (1), <https://doi.org/10.4271/09-11-01-0002>.
- Zaid M. Murad, Altayeb Qasem, **Emhaidy S. Gharaibeh**, and Tareq M. Abu-khait, (2019)

- "Engineering Analysis of Dynamic Contractors' Cash Flow influences by Change Order in Jordanian Construction Industry," *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 11, No. 5, pp. 61-71.
- Altayeb Qasem , Zaid M. Murad , **Emhaidy S. Gharaibeh**. (2019). "Impact of Supply Chain Strategy and Change Order on Contractors' Cash Flow in Jordanian Construction Industry: A Case Study of Basic Educational School Construction", *International Journal of Supply Chain Management*, Vol.8, No. 3, pp. 460-473.
 - **Gharaibeh, E.S.** (2016) "A Markov Chain Model for Assessment and Prediction of Bridge Condition and Maintenance Actions", ICIMART'16, 2nd International Conference on Infrastructure Management, Assessment and Rehabilitation Techniques, Sharjah, UAE, 8-10, March 2016
 - **Gharaibeh, E.S.**, and Shahid Kabir (2011) "Revealing an Engineering Perspective: Conservation of the Rish Heritage and Cultural Influence of Al Ahsa", First National Heritage Forum, Jedah, 18-20/12/1432H.
 - **Gharaibeh, E.S.** and Abu Abdo, A. M. (2011). "Assessment of Traffic Safety and Awareness among Youth in Al-Ahsa Region, Saudi Arabia", *Journal of Emerging Trends in Engineering and Applied Sciences*, **2** (2), 210-215.
 - **Gharaibeh, E.S.**, Haimour, No'man M., and Akash, Bilal A. (2011). "Evaluation of Current Municipal Solid Waste Practice and Management for Al-Ahsa, Saudi Arabia, *International Journal of Sustainable Water and Environmental Systems*, **2**(2), 103-110.
 - Tantawi, H.M. and **Gharaibeh, E.S.** (2006). "Early Estimation of Hardened Concrete Strength," *Journal of Applied Sciences*, Asian Network for Scientific Information, **6**(3), 543-547.
 - **Gharaibeh, E.S.** (2005). "Reliability of Systems Having Dependent-Components: Probabilistic Approach," *Mu'tah Lil-Buhuth wad-Dirasat*, Mutah University, **21**(1), 17-25.
 - **Gharaibeh, E.S.** (2005). "Bridge Maintenance planning: Probabilistic Approach," *Journal of Applied Sciences*, Asian Network for Scientific Information, **5**(6), 1052-1055.
 - Mahasneh, B.Z. and **Gharaibeh, E.S.** (2005). "Enhancing Filled-tube Properties By Using Fiber Polymers In Filling Matrix," *Journal of Applied Sciences*, Asian Network for Scientific Information, **5**(2), 232-235.
 - **Gharaibeh, E.S.**, Frangopol, D.M., and Onoufriou, T. (2002). "Reliability-Based Importance Assessment of Structural Members with Applications to Complex Structures," *Computers & Structures* , Pergamon , **80**(12), 2002, 1111-1131.
 - Frangopol, D.M, M. Miyake, J. S. Kong, **Gharaibeh, E.S.**, and Estes, A. C. "Reliability- and Cost-Oriented Optimal Bridge Maintenance Planning," Chapter 10 in *Recent Advances in Optimal Structural Design*, ASCE , Reston, Virginia, 2002, 257-270 (ASCE State-of-the-Art of Civil Engineering Award, 2004).
 - **Gharaibeh, E.S.** (2003). "Bridge Maintenance Planning: Probabilistic Approach," *Proceedings of the Ninth Arab Structural Conference*, Abu Dhabi, UAE.
 - Yang, S-I., **Gharaibeh, E.S.**, Frangopol, D.M., and Neves, L.C. (2002). "System reliability for bridge evaluation and service life prediction," *Proceedings of the First International*

- Conference on Bridge Maintenance, Safety, and Management, IABMAS'02, Barcelona, Spain, July 14-17; in Bridge Maintenance, Safety and Management, J.R. Casas, D.M. Frangopol, and A.S. Nowak, eds., CIMNE, Barcelona, Spain, 9 pages on CD-ROM.*
- **Gharaibeh, E.S. (2002).** “Towards Reliability Based Design Code,” *Proceedings of The 6th international conference on concrete technology for Developing countries, Amman-Jordan. Vol.3, 857-862.*,
 - Mahasneh, B.Z. and **Gharaibeh, E.S. (2002).** “The effect of concrete Confinement on the strength of filled steel pipe columns”, *Proceedings of The 6th international conference on concrete technology for Developing countries, Amman-Jordan. Vol.3, 857-862.*,
 - Frangopol, D.M., **Gharaibeh, E.S.**, Yang, S-I., and Casas, J.R. (2001). “Bridge maintenance based on system reliability,” *Proceedings of the 5th NSF Workshop on Bridge Research in Progress, Minneapolis, Minnesota, October 8-10, 229-234.*
 - Frangopol, D.M., Kong, J.S., and **Gharaibeh, E.S. (2001).** “Reliability-based maintenance programs for bridge stocks,” *Proceedings of the 8th International Conference on Structural Safety and Reliability, ICOSSAR'01, Newport Beach, California, June 17-22, in ICOSSAR'01, Structural Safety and Reliability, R.B. Corotis, G.I. Schueller and M. Shinozuka, eds., Sweets and Zeitlinger Publishers, 2002, 7 pages on CD-ROM.*
 - Frangopol, D.M., Kong, J.S., and **Gharaibeh, E.S. (2001).** “Maintenance strategies for bridge stocks: Cost – reliability interaction,” *Proceedings of the Second International Conference on Current and Future Trends in Bridge Design, Construction, and Maintenance, Hong Kong, April 25-26, 10 pages; in Current and Future Trends in Bridge Design, Construction and Maintenance 2, P.C. Das, D.M. Frangopol, and A.S. Nowak, eds., Book published by Thomas Telford, The Institution of Civil Engineers, Thomas Telford, London, 13-22*
 - Frangopol, D.M., **Gharaibeh, E.S.**, Kong, J.S., and Miyake, M. (2001). “Reliability-based evaluation of rehabilitation rates of bridge groups,” *Proceedings of the International Conference on Safety, Risk and Reliability-Trends in Engineering, IABSE, Malta, March 21-23; Safety, Risk and Reliability – Trends in Engineering, Conference Report, IABSE-CIB-ECCS-fib-RILEM, Malta, 267-272, also on CD-ROM, 1001-1006.*
 - Frangopol, D.M., Kong, J.S., and **Gharaibeh, E.S. (2000).** “Optimum maintenance strategy: Steel bridges,” *Proceedings of the Conference on Bridge Rehabilitation, The Institution of Civil Engineers, London, U.K., October 2-3, 12 pages.*
 - Frangopol, D.M., Kong, J.S., Akgul, F., and **Gharaibeh, E.S. (2000).** “Maintaining reliability of steel bridges based on minimum expected cost,” *Proceedings of the Ninth IFIP WG 7.5 Working Conference on Reliability and Optimization of Structural Systems, Ann Arbor, Michigan, September 25-27; Reliability and Optimization of Structural Systems, A.S. Nowak and M.M. Szerszen, eds., Chelsea, Michigan, 85-94.*
 - **Gharaibeh, E.S.**, and Frangopol, D.M., (2000). “Safety assessment of highway bridges based on system reliability and redundancy,” *Congress Report, 16th Congress of IABSE, Lucerne, Switzerland, 274-275; Structural Engineering for Meeting Urban Transportation Challenges, IABSE Congress Lucerne, Switzerland, 8 pages on CD-ROM.*
 - Kong, J.S., Frangopol, D.M., and **Gharaibeh, E.S. (2000).** “Life prediction of highway

- bridges with or without preventive maintenance,” *Probabilistic Mechanics and Structural Reliability*, A. Kareem, A. Haldar, B.F. Spencer and E.A. Johnson, eds., ASCE, PMC2000-300, 6 pages on CD-ROM.
- **Gharaibeh, E.S.**, Hanai, T., Kong, J.S., Xi, Y., and Frangopol, D.M. (2000). “Effects of uncertainties on chloride penetration in saturated concrete,” *Probabilistic Mechanics and Structural Reliability*, A. Kareem, A. Haldar, B.F. Spencer and E.A. Johnson, eds., ASCE, PMC2000-241, 6 pages on CD-ROM.
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 - Frangopol, D.M., **Gharaibeh, E.S.**, Kong, J.S., and Miyake, M. (2000). “Integration of whole life costing with reliability in optimal management of bridge networks,” Proceedings of the RILEM/CIB/ISO International Symposium on Integrated Life-Cycle Design of Materials and Structures, ILCDES 2000, Helsinki, Finland, May 22-24; in *Integrated Life-Cycle Design of Materials and Structures ILCDES 2000*, A. Sarja, ed., RILEM Publications, Cachan, 99-103.
 - **Gharaibeh, E.S.**, Frangopol, D.M., Shing, P.B., and Hearn, G. (2000). “System function, redundancy, and component importance: Feedback for optimal design,” *Advanced Technology in Structural Engineering*, M. Elgaaly, ed., ASCE, Reston, Virginia, 8 pages on CD-ROM.
 - Frangopol, D.M., Miyake, M., Kong, J.S., and **Gharaibeh, E.S.** (2000). “Reliability- and cost- oriented optimal bridge maintenance planning,” *Advanced Technology in Structural Engineering*, M. Elgaaly, ed., ASCE, Reston, Virginia, 8 pages on CD-ROM.
 - Frangopol, D.M., Kong, J.S., and **Gharaibeh, E.S.** (2000). “Bridge management based on lifetime reliability and whole life costing: The next generation,” *Bridge Management 4*, M.J. Ryall, G.A.R. Parke, and J.E. Harding, eds., Thomas Telford, London, 392-399.
 - Enright, M.P., Frangopol, D.M., and **Gharaibeh, E.S.** (2000). “Reliability of bridges under aggressive conditions,” *Applications of Statistics and Probability*, R.E. Melchers, and M.G. Stewart, eds., Balkema, Rotterdam, 1, 323-330.
 - **Gharaibeh, E.S.**, Frangopol, D.M., and Enright, M.P. (2000). “Redundancy and member importance evaluation of highway bridges,” *Applications of Statistics and Probability*, R.E. Melchers, and M.G. Stewart, eds., Balkema, Rotterdam, 2, 651-658.
 - Frangopol, D.M., **Gharaibeh, E.S.**, Hearn, G., and Shing, P.B. (1998). “System reliability and redundancy in codified bridge evaluation and design,” *Structural Engineering World Wide 1998*, N.K. Srivastava, ed., Paper Reference T121-2, Elsevier, Amsterdam, 1998, 9 pages on CD-ROM.
 - **Gharaibeh, E.S.**, Frangopol, D.M., and Shing, P. B. (1998). “Structural importance assessment of bridge members: A reliability-based approach,” *Developments in Short and Medium Span Bridge Engineering’98*, L. Dunaszegi, ed., Canadian Society of Civil Engineering, Montreal, 2, 1221-1233 (also on CD Rom).