

# Omar H. El-Anwar

Lecturer

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## EDUCATION

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- **University of Illinois at Urbana–Champaign, Urbana, Illinois**
  - **Ph.D. in Civil Engineering**, July 2009.
  - Dissertation Title: Multi-Objective Optimization of Large-Scale Temporary Housing Arrangements after Natural Disasters.
  - GPA: 4.0 / 4.0.
- **Cairo University, Cairo, Egypt**
  - **M.Sc. in Construction Engineering and Management**, October 2005.
  - Thesis Title: A Knowledge-Based Expert System Application for Organization Structure Design and Individual Assessment.
  - GPA: 4.0 / 4.0.
- **Cairo University, Cairo, Egypt**
  - **B.Sc. in Civil Engineering**, Distinction with 1st Class Honors, July 2003.
  - Senior Graduation Project: Construction Engineering and Management.
  - GPA: 95.14 / 100, Distinction with Honors.

## INDUSTRY EXPERIENCE

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- **Process Improvement Director**, PACER Consultants, Egypt (Present)
  - Developed Time and Cost Management and Control Procedures for Design Projects using the Last Planner System™
  - Managed the design team for the Carrefour Torah Market Project
  - Supported Strategic Planning by developing organizational cash flow forecasts and portfolio profitability analysis
  - Developed projects internal reporting procedures for Company's Top Management
- **Lead Cost Estimator**, Project Safe Haven Team, USA
  - Developed conceptual cost estimates for more than 70 vertical evacuation structures on WA State Coast (2010-2012).
  - Member of the University of Washington team
- **Faculty Intern**, Turner Construction Company, USA
  - Turner Construction Seattle Office, Seattle, WA, June 9-24, 2011.
  - "SeaTac Airport Consolidated Car Rental Facility Project," Turner, SeaTac, WA, June 27 –July 8, 2011.

- **Faculty Intern**, Skanska, USA
  - “Good Samaritan Hospital Expansion Project,” Skanska, Puyallup, WA, Aug. 9-20, 2010.
  - Preconstruction Team, Skanska, Seattle, WA, Aug. 23 – Sep. 7, 2010.
- **Structural Engineer**, Arab Consulting Engineers (Moharram-Bakhoum), Cairo, Egypt, December 2003 – November 2004.
  - Performed soil-structure interaction analysis and prepared structural drawings for preliminary design of Dubai Rail Project.
  - Performed structural steel design in other projects.
- **Structural Engineer Intern**, Dar El Handasa Engineering Design Bureau, Cairo, Egypt, July 2002 – August 2002.
  - Performed structural load calculations and prepared SAP 2000 Nonlinear models for Jabal al-Qalaa Commercial and Residential Project, Mecca, Saudi Arabia.
- **Construction Site Engineer (Trainee)**, Sabour Engineering Consulting Bureau, Cairo, Egypt, June 2001 – August 2001.
  - Trained for field monitoring and inspection of the construction of a new building for Al-Ahram Newspaper in Downtown Cairo, Egypt.
- **Construction Site Engineer (Trainee)**, Sabour Engineering Consulting Bureau, Cairo, Egypt, July 2000 – August 2000.
  - Trained for field monitoring and inspection of the construction of the new headquarters for The Central Bank of Egypt in Downtown Cairo, Egypt.

## AWARDS AND HONORS

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### A) National Awards (USA)

1. Project Safe Haven received the **2012 National Award in Excellence** in mitigation by the Western States Seismic Policy Council. The awardees are Washington State Emergency Management Division, the University of Washington, and Washington Department of Natural Resources.
2. **Third Place Poster Award**, ASCE Construction Research Congress, Seattle, April 4-7, 2009

### B) Other Awards

3. **Royalty Research Fund Award** at University of Washington, \$37,000, 09/2010 – 09/2012
4. **CBE Travel Fund**, University of Washington, Summer 2010
5. **CBE Travel Fund**, University of Washington, Spring 2010
6. **W.E. O’Neil Pre-Doctoral Fellowship**, University of Illinois, 2007 - 2008.

A merit based scholarship awarded to the most deserving graduate student in construction engineering and management.

**7. The Arab American Association of Engineers and Architects Scholarship Award,** Chicago, Illinois, 2007.

A merit based scholarship awarded annually to the most deserving students in engineering, computer science, or architecture in recognition of their academic and extra-curricular activities.

**8. The Graduate College and Department of Civil and Environmental Engineering Conference Travel Award,** University of Illinois, 2007.

A competition-based award intended to support students who will be presenting papers, posters, or creative work at the conferences they attend.

**9. Phi Kappa Phi Honor Society,** University of Illinois, 2006.

Honors high level of exemplary scholarship at the University of Illinois across all disciplines.

**10. Teaching/Research Assistantship and Tuition Scholarship,** University of Illinois, 2005 - 2009.

**11. Departmental Fellowship,** University of Illinois, 2005 – 2006.

A merit based scholarship awarded to the most deserving new student entering the Ph.D. program in construction engineering and management.

**12. Pre-Doctoral Grant,** Cairo University, Egypt, 2005.

**13. Thesis Grant,** Cairo University, Egypt, 2005.

**14. Teaching Assistantship and Tuition Scholarship,** Cairo University, 2003 to 2005.

**15. Soil Mechanics and Foundations Research Laboratory Prize,** Cairo University, 2004.

**16. Soil Mechanics and Foundations Research Laboratory Prize,** Cairo University, 2003.

**17. Distinction and Best Senior Construction Engineering and Management Project,** Cairo University, Egypt, 2003.

**18. Cairo University Excellence Award,** Cairo University, Egypt, 2000, 2001, 2002 and 2003.

## **TEACHING EXPERIENCE**

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### **A) Courses Taught at Cairo University**

- Project Planning and Control STRN342, (Co-Instructor)
- Construction Project Management STRN224, (Instructor)
- Construction Project Management CVE201, (Co-Instructor)
- Engineering Economics CVE202, (Co-Instructor)
- Advanced Selected Topics (Lean Construction and Research Methods) STR665 and STR764, (Instructor)
- Quantity Surveying and Cost Engineering STRN419, (Co-Instructor)
- Construction Management STR561, (Instructor)
- Cost Estimate and Control STR569, (Instructor)

## B) Courses Taught at the University of Washington

- Construction Accounting CM312 (3 credits), (Instructor)
- Construction Estimating I CM331 (4 credits), (Instructor)
- Construction Operations and Productivity CM588 (3 credits), (Instructor)
- Colloquium-Practicum on Research-Practice and Teaching-Learning BE550, (replacement co-Instructor, Spring 2012)

## C) Teaching Assignments at Other Institutions

- Teaching Assistant, Construction Planning (CEE421), University of Illinois at Urbana-Champaign, Urbana, IL, USA, seven semesters from Spring 2006 to Spring 2009.
- Instructor, Primavera Project Planner<sup>TM</sup> course, Construction Engineering and Management Lab., Cairo University, 2004 - 2005.
- Sections Instructor, Construction Management, Cairo University, Cairo, Egypt, Spring 2004 and Spring 2005.
- Sections Instructor, Construction Management, Institute of Aviation Engineering and Technology, Cairo, Egypt, Spring 2005.
- Sections Instructor, Cost Estimates and Control, Cairo University, Cairo, Egypt, Spring 2005.
- Teaching Assistant, Construction Engineering Senior Graduation Project, Cairo University, Cairo, Egypt, Spring 2004 and Spring 2005.
- Sections Instructor, Engineering Economics, Cairo University, Cairo, Egypt, Fall 2004.
- Sections Instructor, Project Planning and Control, Cairo University, Cairo, Egypt, Fall 2003 and Fall 2004.

## RESEARCH AND SCHOLARLY ACTIVITY

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### A) Funded research Projects

1. **Modular Prefabrication for Mid-high Rise Urban Infill in Seattle**, Skanska Innovation Grants, \$49,047, 09/2012 – 03/2013, PI: Carrie Dossick, Co-PIs: Kate Simonen and **Omar El-Anwar**.
2. **WSDOT Building Asset Management: An Exploratory Case Study**, Washington State Department of Transportation (WSDOT), \$15,008, 11/2012 – 06/2013, PI: **Omar El-Anwar**, Co-PIs: Giovanni Migliaccio and Ken-Yu Lin.
3. **Designing the Project Delivery Process for Green Infrastructure Projects**, Transportation Northwest (TransNow), Total budget \$104,265 (\$34,716 from TransNow and \$69,549 UW cost sharing), 07/2010 – 12/2011, PI: Yong-Woo Kim, Co-PIs: **Omar El-Anwar** and Kamal Ahmed.

4. **Identifying Optimal Alternative Housing Plans for Displaced Populations after Natural Disasters**, Royalty Research Fund at University of Washington, \$37,000, 09/2010 – 09/2012, PI: **Omar El-Anwar**.
5. **Pacific County Safe Haven Project**, National Oceanic and Atmospheric Administration (National Tsunami Hazard Mitigation Program), \$180,000, 01/2010 – 07/2011, PI: Bob Freitag, Engineering Lead: **Omar El-Anwar**, Design Charrette Lead: Ron Kasprisin.
6. **Grays Harbor County Safe Haven Project**, National Oceanic and Atmospheric Administration (National Tsunami Hazard Mitigation Program) and State of Washington, \$160,000, 01/2011 – 07/2012, PI: Bob Freitag, Engineering Lead: **Omar El-Anwar**, Design Charrette Lead: Ron Kasprisin.
7. **ECL+VI Construction Catalyst – Merging UW Experiential and Contextual Learning (ECL) model with MMUST Vertical Integration Model**, 2012 HP Catalyst Leadership Fund, \$100,000, 07/2012 – 06/2014, UW PI: Giovanni Migliaccio, UW Co-PIs: **Omar El-Anwar**, Carrie Dossick, Ken-Yu Lin, Ahmed Abdel Aziz, Kimo Griggs, in addition to the Masinde Muliro University of Science and Technology team lead by Isaac K'Owino.
8. **Learning to Create Sustainable Built Environments: Experiential and Contextual Learning (ECL) with Information and Communication Technology for a 21st Century Collaborative Global Education**, HP Catalyst Initiative: Global Collaboratories Consortium, \$150,000 (including \$130,000 in-kind), 09/2011 – 06/2013, PIs: Giovanni Migliaccio, Co-PIs: **Omar El-Anwar**, Carrie Dossick, Ken-Yu Lin, Ahmed Abdel Aziz.

## **B) Technical Reports**

1. Modular Prefabricated Residential Construction: Constraints and Opportunities, Skanska USA internal report, Skanska Innovation Grant, 2012 (co-author).
2. Design and Construction Innovation Through Collaboration and Value-Adding: Story of Virginia Mason Hospital and Medical Center, The Pacific Northwest Center for Construction Research and Education (PNCCRE), 2013 (co-author).
3. Understanding Collaboration Environments to Support Green Infrastructure Construction, developed for Transportation Northwest (TransNow), 2011 (co-author).
4. Grand Challenges for Data Sensing and Analysis, developed for the American Society of Civil Engineering (ASCE), 2011 (co-author).
5. Project Safe Haven: Vertical Evacuation Structures Conceptual Cost Analysis, developed for The National Tsunami Hazard Mitigation Program, 2011 (co-author).
6. Project Safe Haven: Tsunami Vertical Evacuation on the Washington Coast – Makah and Quileute Tribes, The National Tsunami Hazard Mitigation Program, 2012 (co-author).
7. Project Safe Haven: Tsunami Vertical Evacuation on the Washington Coast – Pacific County, developed for The National Tsunami Hazard Mitigation Program, 2011 (co-author).
8. Project Safe Haven: Tsunami Vertical Evacuation on the Washington Coast – Grays Harbor County, developed for The National Tsunami Hazard Mitigation Program, 2011 (co-author).

### C) Peer-Reviewed Journal Papers (Published and Accepted)

9. Kandil, A., El-Rayes, K., and **El-Anwar, O.** (2010) "Optimization Research: Enhancing Robustness of Large-Scale Multi-Objective Optimization in Construction," *Journal of Construction Engineering and Management*, ASCE, 136(1), 17-25.
10. **El-Anwar, O.** and Adel Aziz, T. (2014) "An Integrated Urban-Construction Planning Framework for Slums Upgrading Projects," *Journal of Construction Engineering and Management*, ASCE, Special Bilingual Issue on Engineering in the Americas.
  - This paper will also be published in Spanish in the *Revista Ingeniería de Construcción*.
11. **El-Anwar, O.** (2013) "Robust Optimization of Hybrid Housing Development Plans to Maximize Net Societal Benefit Following Disasters," *Journal of Computing in Civil Engineering*, ASCE, accepted for publication, posted ahead of print on May 18, 2012. doi:10.1061/(ASCE)CP.1943-5487.0000234.
12. Becerik-Gerber, B., Siddiqui, M., Brilakis, I., **El-Anwar, O.**, El-Gohary, N., Mahfouz, T., Li, S., and Jog, G. "Civil Engineering Grand Challenges: Opportunities for Data Sensing, Information Analysis, and Knowledge Discovery," *Journal of Computing in Civil Engineering*, ASCE, accepted for publication.
13. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2010) "Maximizing the Sustainability of Integrated Housing Recovery Efforts," *Journal of Construction Engineering and Management*, ASCE, 136(7), 794-802.
14. **El-Anwar, O.** "Maximizing the Net Social Benefit of the Construction of Post-Disaster Alternative Housing Projects," *Disasters*, accepted for publication.
15. **El-Anwar, O.** and Chen, L. (2013) "Computing a Displacement Distance Equivalent to Optimize Plans for Post-Disaster Temporary Housing Projects," *Journal of Construction Engineering and Management*, ASCE, accepted for publication, posted ahead of print on May 4, 2012. doi:10.1061/(ASCE)CO.1943-7862.0000601.
16. **El-Anwar, O.** and Chen, L. (2013) "Maximizing the Computational Efficiency of Temporary Housing Decision Support following Disasters," submitted to the *Journal of Computing in Civil Engineering*, ASCE, accepted for publication, posted ahead of print on August 14, 2012. doi:10.1061/(ASCE)CP.1943-5487.0000244.
17. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2010) "Maximizing Temporary Housing Safety after Natural Disasters," *Journal of Infrastructure Systems*, ASCE, 16(2), 138-148.
18. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2010) "Minimization of Socioeconomic Disruption for Displaced Population Following Disasters," *Disasters*, 34(3), 865-883.
19. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2009) "Optimizing Large-Scale Temporary Housing Arrangements after Natural Disasters," *Journal of Computing in Civil Engineering*, ASCE, 23(2), 110 - 118.
20. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2009) "An Automated System for Optimizing Post-Disaster Temporary Housing Allocation," *Journal of Automation in Construction*, 18(7), 983-993.
21. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2008) "Multi-Objective Optimization of Temporary Housing for the 1994 Northridge Earthquake," *Journal of Earthquake Engineering*, 12(1), 81- 91.

#### D) Peer-Reviewed Conference Proceedings and Presented Papers

22. Dossick, C.S., Azari, R., Kim, Y., and **El-Anwar, O.** (2013) "IPD In Practice: Innovation in Healthcare Design and Construction," *Proceedings of the 2013 Architectural Engineering Institute (AEI) Conference*, The Pennsylvania State University, April 3 – 5, accepted for publication.
23. Kim, Y., **El-Anwar, O.**, and Houston, M. (2012) "The Relationship between Delivery Processes and Transportation Projects Performance," *Proceedings of the ASCE Construction Research Congress*, West Lafayette, IN, May 21-23, 2012.
24. **El-Anwar, O.** and Kim, Y.W. (2010) "Multi-Objective Optimization of Process Design using Process-Based Sustainable Impact Analysis," *Proceedings of the ASCE International Conference on Computing in Civil and Building Engineering*, W. Tizani (Editor), 30 June-2 July, Nottingham, UK, University of Nottingham Press, Paper 198, p. 395, ISBN 978\_1\_907284\_60\_1.
25. **El-Anwar, O.** and Abdel Aziz, T. (2011) "An Automated Collaborative Framework to Develop Scenarios for Slums Upgrading Projects According to Implementation Phases and Construction Planning," *Proceedings of the ASCE International Workshop on Computing in Civil Engineering*, June 19-22, 2011, Miami, FL.
26. **El-Anwar, O.** and Ahmed, K. (2010). "Minimizing the Environmental and Economic Impacts of Highway Construction and Repair Projects," *Proceedings of the 2nd International Conference on Construction in Developing Countries (ICCIDC-II)*, August 3-5, Cairo, Egypt.
27. El-Rayes, K. and **El-Anwar, O.** (2009) "Maximizing Sustainability of Low-Income Housing Projects," *Proceedings of the NSF International Conference and Workshop on Sustainable Green Building Design and Construction*, Cairo, Egypt, March 8-11, 2009.
28. **El-Anwar, O.** and Chen, L. (2012) "Creating a Community-Based Housing Response Pool," *Proceedings of the ASCE Construction Research Congress*, West Lafayette, IN, May 21-23, 2012.
29. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2011) "Preparing for a New Madrid Earthquake: Accelerating and Optimizing Temporary Housing Decisions for Shelby County, TN," *Proceedings of the ASCE International Workshop on Computing in Civil Engineering*, June 19-22, 2011, Miami, FL.
30. **El-Anwar, O.** (2010) "Optimizing Alternative Housing Projects in the Aftermath of Natural Disasters," *Proceedings of the ASCE Construction Research Congress*, Banff, Canada, May 8-11, 2010.
31. El-adaway, I. and **El-Anwar, O.** (2010) "Developing Optimal Hazard Insurance Policy Strategies," *Proceedings of the ASCE Construction Research Congress*, Banff, Canada, May 8-11, 2010.
32. Abdel Aziz, T. and **El-Anwar, O.** (2010). "A Framework for an Automated Decision Support System to Optimize the Upgrading and Replacement Projects for Slums Areas," *Proceedings of the 1st International Conference on Sustainability and the Future*, Cairo, Egypt, November 23-25, 2010.
33. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2009) "An Automated System for Optimizing Temporary Housing Arrangements after Natural Disasters," *Proceedings of the ASCE Construction Research Congress*, Seattle, April 4-7, 2009.

34. **El-Anwar, O.**, El-Rayes, K., and Elnashai, A. (2007) "Multi-Objective Optimization of Temporary Housing for the 1994 Northridge Earthquake," *Proceedings of the International Symposium on Earthquake Loss Estimation for Turkey HAZTURK-2007*, Istanbul, Turkey, September 24-26, 2007.
35. **El-Anwar, O.** and El-Rayes, K. (2007). "Post-Disaster Optimization of Temporary Housing Efforts", *Proceedings of the ASCE Construction Research Congress*, Island of Grand Bahamas, May 6-8, 2007.

#### **E) Posters**

36. "Identifying Optimal Tsunami Vertical Evacuation Strategies Using Participatory Planning", Poster Session, 36th Annual Natural Hazards Research and Applications Workshop, Broomfield, Colorado, July 9-12, 2011.
37. "Assessing Program Learning Outcomes: An Outcome-Oriented Approach" together with Yong-Woo Kim, Ahmed Abdel Aziz, and Ken-Yu Lin. Poster was presented at 6th Annual Teaching and Learning Symposium at UW (April 20, 2010), which is coordinated by the Center for the Advancement of Learning and Teaching, the Center for Instructional Development and Research, the UW Teaching Academy, as well as other centers.
38. "Multi-Objective Optimization of Temporary Housing Arrangements after Natural Disasters", Poster Session, ASCE Construction Research Congress, Seattle, April 4-7, 2009. Received the Third Place Poster Award.
39. "Multi-Objective Optimization of Temporary Housing Arrangements after Natural Disasters", Poster Session, ASCE Construction Research Congress 2008 Annual Convention, Chicago, June 10, 2008.
40. "Multi-Objective Optimization for Post-Disaster Temporary Housing", Poster Session, ASCE Construction Research Congress 2006 Annual Convention, Chicago, October 21, 2006.

#### **F) Invited Lectures and Presentations**

- "An Integrated Construction-Urban Planning Framework for Slums Upgrading Projects," BE PhD Colloquium, College of Built Environments, University of Washington, Seattle, WA, USA, October 13, 2011.
- "Quantitative Methods to Support Decision Making in Construction Planning and Management," for CM535: Research Methods, graduate course, University of Washington, Seattle, WA, USA, July 25, 2011.
- Panelist and speaker, Tsunami Design session, 2013 Earthquake Engineering Research Institute (EERI) Annual Meeting: Resilient Communities, Seattle, WA, February 12-15, 2013.
- "Transforming Post-Shelter Housing Assistance through Capacity Building and Sharing," Washington State Emergency Management Division, Camp Murray, WA, USA, January 12, 2012. Presentation attended by representatives from the Federal Emergency Management Agency (FEMA), WA Emergency Management Division, WA Department of Commerce, WA Department of Social and Health Services, King County, and WA Department of Agriculture.



- “Computing a Displacement Distance Equivalent to Meet Displaced Families’ Needs,” International Research Committee on Disasters (IRCD) Researchers Meeting at the Natural Hazards Workshop, the International Sociological Association’s Research Committee on Disasters (RC 39), Broomfield, Colorado, July 12 and 13, 2011.
- “Discussion of the Japan Earthquake, Tsunami, Reactors, and Architecture, Urbanism, and Emergency Responses,” Invited Talk as a Panel Member, The Exhibit on Vision of Future Cities / Struggling Cities: From Japanese Urban Projects in the 1960s, Seattle Center, Seattle, WA, USA, April 1, 2011.
- “Effective Presentation”, Effective Presentation Workshop, Faculty and Leadership Development Center, Cairo University, Cairo, Egypt, June 7-9, 2010.
- “Multi-Objective Optimization of Temporary Housing Arrangements after Natural Disasters,” BE Colloquium, College of Built Environments, University of Washington, Seattle, WA, USA, December 10, 2009.
- “Financial Modeling for Temporary Housing Arrangements after Natural Disasters,” for CM412: Construction Practice, undergraduate course for senior students, University of Washington, Seattle, WA, USA, April 15, 2009.
- “Multi-Objective Optimization of Large-Scale Temporary Housing Arrangements after Natural Disasters,” San Diego State University, San Diego, CA, USA, March 3, 2009.
- "Multi-Objective Optimization of Temporary Housing Arrangements after Natural Disasters", Invited Poster Presentation, 5th EKS Annual Retreat, Allerton Park and Retreat Center, Monticello, IL, February 7-8, 2009.
- "Multi-Objective Optimization of Temporary Housing Arrangements after Natural Disasters", Invited Poster Presentation, NSF Summative Site Visit to the Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, Urbana, USA, IL, June 11-12, 2008.
- "Multi-Objective Optimization of Temporary Housing Arrangements after Natural Disasters", Invited Presentation, 4th EKS Annual Retreat, Allerton Park and Retreat Center, Monticello, IL, February 16-17, 2008.
- “Optimizing Time-Cost-Quality Tradeoff in Highway Construction Projects,” for System Engineering and Economics course, University of Illinois at Urbana-Champaign, Urbana, IL, USA, April 26, 2007.
- “Optimizing Time-Cost-Quality Tradeoff in Highway Construction Projects,” for System Engineering and Economics course, University of Illinois at Urbana-Champaign, Urbana, IL, USA, December 5, 2006.
- “Multi-Objective Optimization for Post-Disaster Temporary Housing”, Invited Poster Presentation, NSF Site Visit to the Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, Urbana, IL, USA, November 14–15, 2006.

## SERVICE

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### A) Contributions to the Community

- Engineering and Cost Estimating Lead, Pacific County Safe Heaven Project, Developed Tsunami Vertical Evacuation Plans for the Cities of Long Beach, Ilwaco, Seaview, and Tokeland, as well as North Long Beach Peninsula (including City of Ocean Park).
- Engineering and Cost Estimating Lead, Grays Harbor County Safe Heaven Project, Developed Tsunami Vertical Evacuation Plans for the Cities of Westport, Ocean Shores, Taholah, La Push, Neah Bay, as well as the Makah and Quileute Tribes.
- Member, Washington State Disaster Housing Taskforce, 2011
- Board Member and Treasurer. Egyptian American Scientist and Engineers Association (EASE), 2011-2013
- Chair of the Education and Research Committee, Egyptian American Scientist and Engineers Association (EASE), 2011-2012

### B) Contributions to the Discipline

- Member, Construction Research Congress under the American Society of Civil Engineers (ASCE)
- Member, Lean Construction Institute (LCI)
- Journal Paper Reviewer, Journal of Construction Engineering and Management, ASCE
- Journal Paper Reviewer, Journal of Management in Engineering, ASCE
- Journal Paper Reviewer, Journal of Computing in Civil Engineering, ASCE
- Journal Paper Reviewer, Journal of Automation in Construction, Elsevier
- Journal Paper Reviewer, Journal of Information Technology in Construction, CIB
- Journal Paper Reviewer, Canadian Journal of Civil Engineering, NRC Research Press
- Journal Paper Reviewer, Transactions on Engineering Management, IEEE
- Member of Technical Committee and Co-organizer of Disaster Management and Response Track, ASCE Construction Research Congress, West Lafayette, IN, May, 2012.
- International Committee Member, 2012 International Conference on Sustainable Design, Engineering, and Construction (ICSDEC 2012) - Fort Worth, TX, November 7-9, 2012.

- Best Conference Paper Awards Subcommittee Member, Visualization, Information Modeling, and Simulation (VIMS), ASCE International Workshop on Computing in Civil Engineering, Clearwater Beach, FL, June 17-20, 2012.
- Session Moderator, International Research Committee on Disasters Researchers Meeting at the Natural Hazards Workshop, the International Sociological Association's Research Committee on Disasters (RC 39), Broomfield, Colorado, July 12 and 13, 2011.
- Scientific Committee Member, the International Conference on Sustainable Design and Construction (ICSDC 2011), Kansas City, Missouri, March 23–25, 2011.
- Best Conference Paper Awards Subcommittee Member, Data Sensing and Analysis (DSA), ASCE International Workshop on Computing in Civil Engineering, Miami, FL, June 19-22, 2011.
- Technical Paper Reviewer, ASCE International Workshop on Computing in Civil Engineering, Miami, FL, June 19-22, 2011.
- Scientific Committee Member, the 2nd International Conference on Construction in Developing Countries (ICCIDC-II), Cairo, Egypt. August 3-5, 2010.
- Session Chair, ASCE Construction Research Congress, Banff, Canada, May 8-11, 2010.
- Member, Data Sensing and Analysis Task Force, American Society of Civil Engineers Technical Council on Computing and Information Technology) Data Sensing and Analysis (DSA) committee
- Member, Data Sensing and Analysis (DSA) Committee under the ASCE Technical Council on Computing and Information Technology (TCCIT), 2010 - Present
- Member, Education Committee under the ASCE Technical Council on Computing and Information Technology (TCCIT), 2010 - Present
- Member, Visualization, Information Modeling, and Simulation (VIMS) Committee under the ASCE Technical Council on Computing and Information Technology (TCCIT), 2010 - Present
- Member, Carbon Leadership Forum
- Member, The Egyptian Engineers Syndicate