

PROFESSOR FENIOSKY PEÑA-MORA CURRICULUM VITAE
THE FU FOUNDATION SCHOOL OF ENGINEERING AND APPLIED SCIENCE
COLUMBIA UNIVERSITY

Date: February 25, 2024

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1. **Name:** Peña-Mora, Feniosky Avelhermí **Citizenship:** USA
2. **Present Academic Rank:** Endowed Professor
3. **Tenure Status:** Tenured
4. **Administrative Title:**

5. Degrees	Field	Institution	Date Awarded
B.S.	Civil Engineering	UNPHU*	1987 Magna Cum Laude
Post-Graduate	Civil Engineering	UNPHU*	1988 Magna Cum Laude
S.M.	Civil Engineering	MIT	1991
Sc.D.	Civil Engineering Systems	MIT	1994

*UNPHU Universidad Nacional Pedro Henríquez Ureña, Santo Domingo, Dominican Republic

6. Academic Positions Held

XL Instructor	MIT	September 1992 - May 1993
Instructor	MIT	February 1994 - May 1994
Postdoctoral Associate (Central Artery*)	MIT	September 1994 - June 1995
Assistant Professor	MIT	July 1995 - July 1999
Gilbert W. Winslow Career Development Chair	MIT	September 1996-Sept. 1998
IESL Co-Director	MIT	September 1996 - June 2003
Associate Professor	MIT	July 1999 - June 2003
Visitor	University of Sydney	August 1999
Visiting Associate Professor	UIUC	August 2002 - June 2003
Associate Professor	UIUC	June 2003 - August 2006
W. E. O'Neil Faculty Scholar	UIUC	June 2003 - January 2008
Visiting Professor	EPFL	July 2006
Visiting Professor	Loughborough University	July 2006 - July 2007
Associate Provost Fellow	UIUC	August 2006 -December 2007
Senior Associate Dean	UIUC	January 2007 - May 2007
Professor	UIUC	August 2006 - July 2009
Center Affiliate	NCSA/UIUC	August 2006 - July 2009
Faculty Affiliate	Beckman/UIUC	January 2008 - July 2009
Associate Provost	UIUC	January 2008 - July 2009
Edward William and Jane Marr Gutsell	UIUC	January 2008 - July 2009
Endowed Professor		
Visiting Professor	UIUC	July 2009 – July 2012
Dean of the School of Engineering and Applied Science	Columbia University	July 2009 – July 2012
Morris A. and Alma Schapiro Professor of Engineering	Columbia University	July 2009 – July 2012

Professor, Department of Civil Engineering and Engineering Mechanics, of Earth and Environmental Engineering, of Computer Science	Columbia University	July 2009–September 2012
Guest Professor	Guishou Institute of Technology, China	July 2013
Visiting Fellow of the Royal Academy of Engineering	Salford University, UK	March 2014
Visiting Fellow of the Royal Academy of Engineering	Manchester University, UK	March 2014
Visiting Fellow of the Royal Academy of Engineering	Cambridge University, UK	March 2014
Visiting Professor	Tsinghua University, China	July 2013 – present
Visiting Professor	Nankai University, China	September 2017 – present
Professor, Department of Earth and Environmental Engineering	Columbia University	July 2009 - Present
Professor, Department of Computer Science	Columbia University	July 2009 - Present
Edwin Howard Armstrong Professor, Department of Civil Engineering and Engineering Mechanics	Columbia University	September 2012 – Present
Executive Director	Center for Buildings, Infrastructure and Public Space, Columbia University	September 2018 – Present
Dean of Engineering and Sciences	Tecnológico de Monterrey, Mexico	July 2023 - Present

*In residence at the Boston Central Artery/Tunnel Project.

7. a. Other Professional Employment

Montes de Oca	Const. Supervisor	Dominican Rep.	May 1986 - Dec. 1987
Ricart-Mubarak	Structural Engineer	Dominican Rep.	Jan. 1987 - Mar. 1988
Kajima Co.	Summer Intern	Japan	July 1991 - Aug. 1991
Central Artery Department of Design	Asst. to Director	Boston, MA, USA	Sept. 1994 -June 1995
And Construction Commissioner		NY, NY	April 2014-June 2017

b. Major Consulting Activities

Peña Alcántara CM and IT Consultants	Boston, MA, USA	Jan. 1995 – Jun 2003
Boston Public Facilities Department	Boston, MA, USA	Sept. 1996 - Feb. 1997
Omega-Alpha S.A.	Colombia	Aug. 1997 - Jan. 1999
Techint	Argentina	Apr. 1997 - Aug.1997
Ministry of Economic Dev.	Colombia	May 1997 - Aug. 1997
Barrington/InteCap	Boston, MA, USA	Sept. 1997 -June 1999
Massachusetts Turnpike Authority	Boston, MA, USA	Oct. 1998 - Apr. 1999
in Meeting	Boston, MA, USA	Feb. 2000 - Mar. 2002
Responsible for raising \$1.5 Million in angel investments		
Pena Alcantara Consultants, Inc.	NY, USA	Nov. 2017 – Present

c. Professional Registrations

Registered Professional Civil Engineer, Dominican Republic, Exequatur 411, Sept. 7th, 1988, No. 7986
Chartered Construction Manager, United Kingdom, Membership 2013066, Dec. 10, 2014

8. Honors, Recognition, and Outstanding Achievements

a. Student

Received some of the most prominent University and National awards, including the 1982-194 and 1985-1987 UNPHU* Honor Board; 1987 Dominican Board of Universities Academic Excellence Award; Valedictorian, 1987 UNPHU* Engineering School; 1987 Magna Cum Laude Bachelor's Degree UNPHU; 1988 Magna Cum Laude Post-Graduate Degree UNPHU; 1991 NSF Minority Fellowship Honorable Mention; 1991 Ford Foundation Fellowship.

b. Research

Received some of the most prestigious University, National, and International research awards including the 1995 ASCE Journal of Computing in Civil Engineering Best Paper Award; 1996-1998 Gilbert W. Winslow Career Development Chair; 1997-1998 James H. Ferry Fund Award; 1997-1998 Marion and Jasper Whiting Foundation Fellowship; 1998-1999 Cordell W. Hull New Initiatives in Engineering Education Award; 1999-2003 NSF CAREER Award; 1999-2003 White House PECASE Award; 2003-2007 W. E. O'Neil Faculty Scholar; 2003 Plenary Speaker, National Academy of Engineering Frontiers of Engineering Symposium; 2003 Keynote Speaker, ASCE 2003 Convention, Information Technology in Civil Engineering Conference; 2003 Caterpillar Lecture, University of Iowa (*distinguished*); 2004 Plenary Speaker, National Academies Convocation on Facilitation Interdisciplinary Research; 2005 Dean's Distinguished Lecture, Rice University; 2007 Walter L. Huber Civil Engineering Research; 2008 Member, National Academies Committee on Advancing the Productivity and Competitiveness of the U.S. Construction Industry; 2008 Edward William and Jane Marr Gutgsell Endowed Professor; 2008 ASCE Computing in Civil Engineering Award; 2009 Morris A. and Alma Schapiro Professorship; 2010 6th International Conference on Innovation in AEC, State College, PA; Best Student Paper Award for Ph.D. Student; 2010 Construction Industry Institute's Annual Conference; Best Poster Award by Ph.D. Student; 2011 ICCEPM-2011, Sydney, Australia Excellent Paper Award; 2011 FIATECH Celebration of Engineering & Technology Innovation Award Outstanding Researcher category; 2011 ASCE Journal of Construction Engineering and Management Best Journal Paper Award; 2012 ASCE Construction Research Congress; First-Place Best Poster Award; 2012 ASCE Visualization, Information Modeling, and Simulation (VIMS) Committee; Best Conference Paper Award; 2012 ASCE International Conference on Computing in Civil Engineering Best paper award; 2013 International Conference in Construction Engineering and Project Management Best Paper Award; 2013 ASCE James R. Croes Medal; 2014 High-End Foreign Expert Program – Short Term, Beijing State Administration of Foreign Experts Affairs; 2014 Fellow of the Chartered Institute of Building; 2014 ASCE Construction Management Award; 2014 ASCE Journal of Computing in Civil Engineering Best Journal Paper Award; 2015 ASCE Journal of Management in Engineering Best Peer Reviewed Paper Award; 2016 CIOB (Chartered Institute of Buildings) International Outstanding Achievement Awards: Business Management; 2016 Member of the Academy of Sciences of the Dominican Republic; 2016 Member of the US National Academy of Construction; 2018 Thousand Talents Program – Short Term from Tianjin Municipal Bureau of Foreign Experts Affairs (Awarded but not Undertaken); 2018 High-End Foreign Expert Program – Short Term, Beijing State Administration of Foreign Experts Affairs (Awarded but not Undertaken); 2018 American Society of Civil Engineers (ASCE) Peurifoy Construction Research Award; 2020 Fellow of the American Society of Civil Engineers; 2023 Distinguished Member of the American Society of Civil Engineers, and 2024 American Society of Civil Engineers President's Medal.

b. Public Service and Leadership

Received some of the most prestigious University, National, and International public service and leadership recognitions including the 1999 Certificate of Recognition from New England / Boston Section of the Association for the Advancement of Cost Engineering Through Total Cost Management; 2006-2007 Recognition of Service for Leadership as Co-Chair of the Diversity Initiatives Committee, University of Illinois at Urbana-Champaign; 2009 American Council on Education: ACE Fellows Program (differed); 2009 Dominican American National Roundtable Guanin Award; 2009 Hispanic Heritage Award, Police Department, City of New York, Hispanic Society of P.D. N.Y.C., and New York Dominican Officers Organization; 2010 Le Marteleur Award for Distinguished Service to Columbia Engineering Young Alumni; 2010 Carnegie Corporation of New York - Immigrants: The Pride of America (New York Times); 2012 Honor from New York State Association of Black, Puerto Rican, Latino and Asian Legislative Caucus; 2012 Proclamation of Monday, February 27, 2012 as "Dean Feniosky Peña-Mora Appreciation Day" in the Borough of Manhattan by Scott M. Stringer, President, Borough of Manhattan; 2012 Honor from the City of New York Office of the Public Advocate for being a positive role model and engineering pioneer to the Dominican community; 2012 Commendation from the City of New York Office of the Comptroller for the many innovations in the fields of teaching, research and engineering, for hands-on leadership in managing groundbreaking university, engineering programs; for service as an energetic and

articulate advocate; and for tremendous contributions to the City of New York; 2012 Honor from New York City Council by Council Member Ydannis Rodriguez, 10th District Manhattan, for inspirational contributions to the field of Engineering and Applied Sciences and for excellence in educating socially responsible engineering and applied science leaders. Recognized by the Dominican community as a source of profound pride : 2012 Honor from New York State Senator Adriano Espaillat, 31st Senate District, for being a special public servant who goes above and beyond to help others, demonstrating exemplary dedication and accomplishments along the way ; 2012 Certificate of Appreciation US Environmental Protection Agency, Region 2 Hispanic Employment Program (HEP); 2014 Certificate of Appreciation Professional Women in Construction; 2014 Certificate of Appreciation Construction Management Association of America Metro New York-New Jersey Chapter for Promoting and enhancing the Construction Management Profession; 2015 Recognition of Excellence NED University of Engineering and Technology Alumni Association of Tri-State NY-NJ-CT; 2015 Champion Award from the Women Builders Council for shaping and advancing diversity and equal opportunity in the AEC Industry; 2015 Professional Recognition by the Dominican College of Engineers, Architects, and Surveyors; 2015 Public Owner of the Year- Civilian Honoree, New York City Post, Society of American Military Engineers; 2015 Leadership Award by the Tri-State Arab American Association of Engineers And Architects; 2015 Municipal Engineer of the Year, Municipal Engineers of the City of New York; 2015 Outstanding Contributions Award by the American Association of Bangladeshi Engineers and Architects, New York Chapter; 2015 Dominican Role Model Award from the Metropolitan Transit Authority (MTA) Dominican Society of Professionals in Transit (DSPT); 2016 New York City Department of Design and Construction EID Committee Recognition; 2016 Diversity Champion Award: Building Innovation from the Women Construction Owners and Executives; 2016 Recognition by the Dominican Republic American Chamber of Commerce; 2016 Distinguished Member, New York Coalition of Black Architects | The New York Chapter of the National Organization of Minority Architects (NYCOBA|NOMA); 2016 Pabellon Excelencias Sancarleñas USA Honor al Merito y Reconcimiento; 2016 New York City Council Citation for Outstanding Citizenship by Honorable Julissa Ferreras; 2016 Illustrious Award from the Institute for Latino Studies; 2016 Distinguished Son of Santo Domingo, First City in the Americas 1496 by Mayor David Collado and City Council of the National District, DR; 2016 Academic and Professional Excellence Recognition, Dominican College of Engineers, Architects, and Surveyors; 2017 Architecture-Construction-Engineering (ACE) Mentor Program Public Sector Honoree; 2017 Distinguished Expert, Liaocheng Municipal Government, China; 2024 President elect, American Society of Civil Engineers President Elect.

9. Resident Instruction and Continuing Education

a. Resident Instruction

Have taught at MIT, Illinois, and Columbia several subjects including Introduction to C++, Computer Models for Physical and Engineering Systems, Project Management, Project Controls, System and Project Management, Distributed Development of Collaborative Engineering Support Systems, Advanced Systems and Technologies for Global Project Collaboration, Construction Conflict Resolution and Collaboration, Construction Engineering and Management, Strategic Management for Engineering and Construction, Entrepreneurship for Engineering and Construction, and Leadership for Engineering and Construction.

b. Continuing Education

Have taught several continuing education programs including Project Management for Engineers and Managers, Use of Information Technology for Project Management, Distributed Development of Engineering Information Systems

10. Research, Creative, and Other Scholarly Activities

A. Publications

a. Books Authored or Co-Authored, Original Editions

1. Peña-Mora, F., Sosa, C., and McCone, S., Dispute Avoidance and Resolution in Large Scale Civil Engineering Systems, MIT/Prentice Hall Civil and Environmental Engineering Textbook Series, August 2002.

b. Books Edited or Co-Edited, Original Editions

1. Fruchter, R., Peña-Mora, F., and Roddis, K. (eds.), Computing in Civil and Building Engineering, ASCE Press, Reston, VA, 2000.
2. Soibelman, L., and Peña-Mora, F. (eds.), Computing in Civil Engineering, ASCE Press, Reston, VA, 2005.
3. Soibelman, L., and Peña-Mora, F. (eds.), Sustainable Infrastructure, ASCE Press, Reston, VA, 2017.

c. Chapters in Books

1. Peña-Mora, F., Strumming, R., Favela, J., Hussein, K., and Losey, R., "Supporting a 'Real World' Project-Based, Technology-Supported, Collaborative, Distance Learning Environment: The MIT-CICESE Distributed System Engineering Lab" in *Collaborative Design and Learning: Competence Building for Innovation*, Edited by João Bento, José Duarte, Manuel Heitor, and William Mitchell, November 2004.
2. Vadhavkar, S. and Peña-Mora, F., "Geographically Distributed Team Interaction Space - An Empirical Study," in *The Role of Empirical Studies in Understanding and Supporting Engineering Design*, Edited by Eswaran Subrahmanian, Ram Sriram, Paulien Herder, Henri Christiaans, and Ralph Schneider, Delft University Press, The Netherlands, pp. 86-102, December 2004.
3. Golparvar-Fard, M. and Peña-Mora, F., "Design, Implementation, Management and Support of Information and Collaborative Technologies: a Supply Chain Perspective," in the *Construction Supply Chain Management Handbook*, Edited by William O'Brian.
4. Culligan, P. and Peña-Mora, F. (2010) "Interdisciplinarity in Engineering" in *The Oxford Handbook on Interdisciplinarity (HOI)*, Oxford University Press, Oxford, UK, Edited by James Holbrook and Robert Frodeman, July 2010.
5. McDonagh, D., Thomas, J., Khuri, L., Heft Sears, S., and Peña-Mora, F., "Empathetic Design Research Strategies: Designing for, with and by People with Disabilities," in *Handbook of Research on Trends in Product Design and Development: Technological and Organizational Perspectives*, Edited by Arlindo Silva and Ricardo Simões, Business Science Reference, New York, pp. 58-79, 2011.
6. Peña-Mora, F., Golparvar-Fard, M., Aziz, Z., and Roh, S. (2011). "Design Co-Ordination and Progress Monitoring during the Construction Phase using Building Information Modeling Collaborative Design in Virtual Environments," Ed. Wang and Tsai, Springs ISBN 978-94-007-0604-0, Vol. 48., pp. 89-99.

d. Articles in Journals

1. Peña-Mora, F. and Logcher, R., "Capturing Design Assumptions for Rational Coordination, Integration and Negotiation in the Design Process," *Computing Systems in Engineering*, Vol. 3, No. 6, pp. 651-660, 1992.
2. Peña-Mora, F., Sriram, D., and Logcher, R., "Design Rationale for Computer Supported Conflict Mitigation," *ASCE Journal of Computing in Civil Engineering*, Vol. 9, No. 1, pp. 57-72, January 1995. Received the 1995 Best Paper Award from the ASCE Technical Council on Computer Practices.
3. Peña-Mora, F., Sriram, D., and Logcher, R., "Conflict Mitigation System for Collaborative Engineering," *AI EDAM - Artificial Intelligence for Engineering Design, Analysis and Manufacturing*, Special Issue on Concurrent Engineering, Vol. 9, No. 2, pp. 101-124, May 1995.
4. Peña-Mora, F., Hussein, K., and Sriram, D., "CAIRO: A System for Facilitating Communication in a Distributed Collaborative Engineering Environment," *Computers in Industry*, Vol. 29, No. 1-2, pp. 37-50, July 1996.
5. Peña-Mora, F. and Vadhavkar, S., "Augmenting Design Patterns with Design Rationale," *AI EDAM - Artificial Intelligence for Engineering Design, Analysis, and Manufacturing*, Special Issue on Design Rationale, Vol. 11, No. 2, pp. 93-108, April 1997.
6. Peña-Mora, F. and Wang, C., "Computer-Supported Collaborative Negotiation Methodology," *ASCE Journal of Computing in Civil Engineering*, Vol. 12, No. 2, pp. 64-81, April 1998.
7. Peña-Mora, F. and Hussein, K., "Proactive Meeting Management for Distributed Collaborative Design," *International Journal of Advances in Engineering Software*, Vol. 29, No. 10, pp. 839-849, December 1998.
8. Peña-Mora, F. and Hussein, K., "Interaction Dynamics in Collaborative Civil Engineering Design Discourse: Applications in Computer-Mediated Communication," *Journal of Computer-Aided Civil and Infrastructure Engineering*, Vol. 14, pp. 171-185, May 1999.
9. Hussein, K. and Peña-Mora, F., "Frameworks for Interaction Support in Distributed Learning Environments," *ASCE Journal of Computing in Civil Engineering*, Vol. 13, No. 4, pp. 291-302, October 1999.
10. Peña-Mora, F., Vadhavkar, S., Perkins, E., and Weber, T., "Information Technology Planning Framework for Large-Scale Projects," *ASCE Journal of Computing in Civil Engineering*, Vol. 13, No. 4, pp. 226-237, October 1999.
11. Peña-Mora, F., Anumba, C., and Solari, J., "An Integrated Telepresence Environment for Collaboration in Construction," *Engineering with Computers: International Journal for Simulation-Based Engineering*, Special Issue honoring Prof. Steve Fenves on Computer-Aided Engineering, Vol. 16, No. 3-4, pp. 287-305, April 2000.
12. Soibelman, L. and Peña-Mora, F., "Distributed Multi-Reasoning Mechanism to Support Conceptual Structural Design," *ASCE Journal of Structural Engineering*, Vol. 126, No. 6, pp. 733-742, June 2000.

13. Peña-Mora, F., Hussein, K., Vadhavkar, S., and Benjamin, K., "CAIRO: A Concurrent Engineering Meeting Environment for Virtual Design Teams," *Artificial Intelligence in Engineering Journal*, Special issue on Concurrent Engineering, Vol. 14, No. 3, pp. 203-219, July 2000.
14. Peña-Mora, F. and Harpoth, N., "Effective Partnering in an Innovative Procured Multicultural Project," *ASCE Journal of Management in Engineering*, Vol. 17, No. 1, pp. 2-13, Jan-Feb 2001.
15. Peña-Mora, F., and Li, M., "Dynamic-Planning and Control Methodology for Design/Build Fast-Track Construction Projects," *ASCE Journal of Construction Engineering and Management*, Vol. 127, No. 1, pp. 1-17, January-February 2001.
16. Favela, J. and Peña-Mora, F., "An Experience in Collaborative Software Engineering Education," *IEEE Software*, Vol. 18, No. 2, pp. 47-53, March-April 2001.
17. Peña-Mora, F. and Tamaki, T., "Effect of Delivery Systems on a Collaborative Negotiations for Large-Scale Infrastructure Projects," *ASCE Journal of Management in Engineering*, Vol. 17, No. 2, pp. 105-121, March-April 2001.
18. Peña-Mora, F., Vadhavkar, S., and Dirisala, S., "Component-Based Software Development for Integrated Construction Management Software Applications," *AI EDAM - Artificial Intelligence for Engineering, Design Analysis and Manufacturing Journal*, Vol. 15, No. 2, pp. 173-187, April 2001.
19. Peña-Mora, F. and Choudary, K., "Web-Centric Framework for Secure and Legally Binding Electronic Transactions in Large Scale A/E/C Projects," *ASCE Journal of Computing in Civil Engineering*, Vol. 15, No. 4, pp. 248-258, October 2001.
20. Peña-Mora, F. and Park, M., "Dynamic Planning for Fast-Tracking Building Construction Projects," *ASCE Journal of Construction Engineering and Management*, Vol. 127, No. 6, pp. 445-456, November-December 2001.
21. Peña-Mora, F. and Dwivedi, G. "A Multiple Device Collaborative and Real-Time Analysis System for Project Management in Civil Engineering," *ASCE Journal of Computing in Civil Engineering*, Vol. 16, No. 1, pp. 23-38, January 2002.
22. Peña-Mora, F. and Mills, J., "Internet-Based Collaboration for Mission Planning," *International Journal of Computer Integrated Design and Construction (CIDAC)*, Vol. 3, No. 2, April 2002.
23. Soibelman, L. and Peña-Mora, F., "The Multi-Reason Artificial Mind (M-RAM) Project - A Model and a System Prototype to Support the Conceptual Phase of Structural Design for Tall Buildings Through Distributed Multi-Reasoning Algorithms," *International Journal of Computer Integrated Design and Construction (CIDAC)*, SETO, UK, Vol. 3, No. 3, July 2002.
24. Peña-Mora, F. and Tanaka, S., "Information Technology Planning Framework for Japanese General Contractors," *ASCE Journal of Management in Engineering*, Vol. 18, No. 3, pp. 138-149, July 2002.
25. Park, M., and Peña-Mora, F., "Dynamic Change Management for Construction: Introducing the Change Cycle into Model-Based Project Management," *System Dynamics Review*, System Dynamics Society, Albany, NY, Vol. 19, No. 3, pp. 213-242, Fall 2003.
26. Park, M., and Peña-Mora, F., "Development of Dynamic Planning and Control Methodology (DPM): based on the User-defined Dynamic Modeling Approach," *International Journal of IT in Architecture, Engineering, and Construction*, Vol. 1, No. 4, pp. 275-292, December 2003.
27. Peña-Mora, F. and Mathias, C., "AVSAR: A Collaboration System for Disaster search and rescue operations using autonomous vehicles," *International Journal of IT in Architecture, Engineering and Construction* Vol. 2, Issue 2, pp. 91-114, May 2004.
28. Park, M., and Peña-Mora, F., "Reliability Buffering for Construction Projects," *ASCE Journal of Construction Engineering and Management*, Vol. 130, No. 5, pp 626-637, September-October 2004.
29. Lee, S., Peña-Mora, F, and Park, M., "Quality and Change Management Model For Large Scale Concurrent Design and Construction Projects," *ASCE Journal of Construction Engineering and Management*, Vol. 131, No. 8, pp. 890-902, August 2005.
30. Aldunate, R., Peña-Mora, F., and Robinson, G. "Collaborative Distributed Decision Making for Large Scale Disaster Relief Operations: Drawing Analogies from Robust Natural Systems," *Complexity*, Wiley, Hoboken, NJ, Vol. 11, No. 2, pp. 28-38, December 2005.
31. Lee, S., Peña-Mora, F., and Park, M., "Dynamic Planning and Control Methodology For Strategic and Operational Construction Project Management," *Automation in Construction*, Elsevier, Oxford, UK, Vol. 15, No. 1, pp. 84-97, January 2006.
32. Aldunate, R., Peña-Mora, F., Nussbaum, M., and Ochoa, S., "Robust Mobile Ad Hoc Space for Collaboration to Support Disaster Relief Efforts Involving Critical Physical Infrastructure," *ASCE Journal of Computing in Civil Engineering*, Reston, VA, Vol. 20, No. 1, pp. 13-27, January/February 2006.

33. Lee, S., Peña-Mora, F., and Park, M., "Reliability and Stability Buffering Approach: Focusing on the Issues of Errors and Changes in Concurrent Design and Construction Projects," *ASCE Journal of Construction Engineering and Management*, Reston, VA, Vol. 132, No. 5., pp. 452-464, May 2006.
34. Lee, S., Peña-Mora, F. and Park, M. "Web-Enabled System Dynamics Model for Error and Change Management on Concurrent Design and Construction Projects," *ASCE Journal of Computing in Civil Engineering*, Reston, VA, Vol. 20, No. 4, pp. 290-300, July/August 2006.
35. Ng, H., Peña-Mora, F., and Tamaki, T., "Dynamic Conflict Management in Large-Scale Design and Construction Projects," *ASCE Journal of Management in Engineering*, Reston, VA, Vol. 23, No. 2, pp. 52-66, April 2007.
36. Lee, S. and Peña-Mora, F., "Understanding and Managing Iterative Error and Change Cycles in Construction," *System Dynamics Review*, System Dynamics Society, Albany, NY, Vol. 23, No. 1, pp. 35-60, April 2007.
37. Motawa, I., Anumba, C., Lee, S., and Peña-Mora, F., "An Integrated System for Change Management System in Construction," *Automation in Construction*, Elsevier, Oxford, UK, Vol. 16, No. 3, pp. 368-377, May 2007.
38. Peña-Mora, F., Han, S., Lee, S., and Park, M., "Strategic-Operational Construction Management: Hybrid System Dynamics and Discrete Event Approach," *ASCE Journal of Construction Engineering and Management*, Reston, VA, Vol. 134, No. 9, pp. 701-710, September 2008.
39. Kostoulas, D., Aldunate, R., Peña-Mora, F., and Lakhera, S., "A Nature-Inspired Decentralized Trust Model to Reduce Information Unreliability in Complex Disaster Relief Operations," *Journal of Advanced Engineering Informatics*, Amsterdam, Netherlands, Vol. 22, No. 1, pp. 45-58, January 2008.
40. Tsai, M., Liu, L., Peña-Mora, F., and Arboleda, C., "A Preliminary Design of Disaster-Survivable Building Blackbox System for Urban Disaster Response," *Journal of Information Technology in Construction*, Special Issue Sensors in Construction and Infrastructure Management, Vol. 13, pp. 179-192, April 2008.
41. Son, J., Peña-Mora, F., and Aziz Z. "Supporting Collaborative Decision Making In Disaster Response And Recovery Through Improved Situation Awareness," Special Issue of Structural Survey on the role of the built environment professional in disaster management, Vol. 26, Issue 5, pp. 411-425, ISSN:0263-080X, 2008.
42. Peña-Mora F., Aziz Z., Chen A., Plans A., and Foltz S. "Building Assessment During Disaster Response and Recovery," *Institution of Civil Engineers*, Special Issue on Urban Design and Planning, Urban Design and Planning, Vol. 161, Issue 4, pp.183-195 ISSN 1755-0793, 2008.
43. Aziz Z., Peña-Mora, F., Chen A., and Lantz, T., "Supporting Urban Emergency Response and Recovery Using RFID-Based Building Assessment," Special Issue on Disaster Management and the Built Environment, *International Journal of Disaster Prevention and Management*, Vol. 18, No. 1, pp. 35-48, 2009.
44. Peña-Mora, F., Vadhavkar, S, and Aziz Z., "Technology Strategies for Globally Dispersed Construction Teams," *ITcon* Vol. 14, Special Issue Technology Strategies for Collaborative Working, pp. 70-80, <http://www.itcon.org/2009/8>.
45. Menassa, C., Peña-Mora, F., and Pearson, N., "An Option Pricing Model to Evaluate ADR Investments in AEC Projects," *ASCE Journal of Construction Engineering and Management*, 135 (3), pp. 156-168, ASCE, Reston, VA, 2009.
46. Menassa, C. and Peña-Mora, F. "Analysis of Dispute Review Board Applications in US Construction Projects From 1975-2007," *ASCE Journal of Management of Engineering*, 26 (2), pp. 65-77, ASCE, Reston, VA, 2010.
47. Golparvar-Fard M., Peña-Mora F., and Savarese, S. "D4AR- A 4-Dimensional Augmented Reality Model for Automating Construction Progress Data Collection, Processing and Communication", accepted for publication in *Journal of Information Technology in Construction*, Special Issue on Next Generation Construction IT: Technology Foresight, Future Studies, Roadmapping, and Scenario Planning, ISSN 1874-4753, 2009.
48. Aziz Z., Anumba, C., and Peña-Mora, F. (2009), "A Road-Map To Personalized Context-Aware Services Delivery In Construction," *Journal of Information Technology in Construction*, Special Issue on Next Generation Construction IT: Technology Foresight, Future Studies, Road-mapping, and Scenario Planning, ISSN 1874-4753, 2009.
49. Golparvar-Fard, M., Peña-Mora, F., Arboleda, C., and Lee, S. "Visualization of Construction Progress Monitoring with 4D Simulation Model Overlaid on Time-lapsed Photographs." *ASCE Journal of Computing in Civil Engineering (Special Issue on Graphical 3D Visualization in Architecture, Engineering, and Construction)*, ASCE, Reston, VA, Vol. 23, No. 6, pp. 391-404, November/December 2009.
50. Lee, S., Han, S., and Peña-Mora, F. "Integrating Construction Operation and Context in Large-Scale Construction Using Hybrid Computer Simulation." *ASCE Journal of Computing in Civil Engineering*, Reston, VA, Vol. 23, No. 2, pp.75-83. (Invited Paper from an article at the 2007 ASCE Computing in Civil Engineering Workshop, Special Issue in IT Support for Advanced Infrastructure Systems), March/April 2009.

51. Peña-Mora, F., Chen, A. Y., Aziz, Z., Soibelman, L., Liu, L. Y., El-Rayes, K., Arboleda, C. A., Lantz, T. S., Plans, A. P., Lakhera, S., and Mathur, S. (2010), "A Mobile Ad-Hoc Network Enabled Collaborative Framework Supporting Civil Engineering Emergency Response Operations." *ASCE Journal of Computing in Civil Engineering*, Reston, VA, Vol. 24, No. 3, pp. 302-312, May/June 2010.
52. Aziz, Z., Anumba, C.J., and Peña-Mora, F. (2010), "Using Context-Aware Wireless Technologies To Support Teaching And Learning In Built Environment," *ASC International Journal of Construction Education and Research*, ISSN: 1557-8771. Vol. 6 No. 1, pp. 18-29, 2010.
53. Ahn, C., Lee, S., Peña-Mora, F., and AbouRizk, S. "Toward Environmentally Sustainable Construction Processes: The U.S. and Canada's Perspective on Energy Consumption and GHG/CAP Emissions." *Sustainability, Molecular Diversity Preservation International (MDPI)*, Basel, Switzerland, 2010, Vol. 2, No. 1, pp. 354-370 (Invited Review Paper – Special Issue on Environmental Sustainability and the Built Environment).
54. Menassa, C., Peña-Mora, F., and Pearson, N. (2010), "A Study of Real Options with Exogenous Competitive Entry to Analyze ADR Investments in AEC Projects." *ASCE Journal of Construction Engineering and Management*, 135 (3), pp. 156-168, ASCE, Reston, VA, 2010.
55. Menassa, C. and Peña-Mora, F. (2010), "A Hybrid Model Incorporating Real Options and System Dynamics Model to Assess Value of Investments in Alternative Dispute Resolutions." *ASCE Journal of Computing in Civil Engineering*, Vol. 24, No.5, pp. 414-429, ASCE, Reston, VA, 2010.
56. Kamat, V., Golparvar-Fard, M., Martinez, J., Peña-Mora, F., Fischer, M., and Savarese, S. (2010), "CEC: Research in Visualization Techniques for Field Construction." *ASCE Journal of Construction Engineering and Management*, Vol. 137, No. 10, pp. 853-862, 2010.
57. Roh, S., Aziz, Z., and Peña-Mora, F. (2011), "An Object-Based 3D Walk-Through Model for Interior Construction Progress Monitoring." *Automation in Construction*, Elsevier, Vol. 20, No. 1, pp. 66-75, January 2011.
58. Chen, A. Y. and Peña-Mora, F. (2011) "Decentralized Approach Considering Spatial Attributes for Equipment Utilization in Civil Engineering Disaster Response." *ASCE Journal of Computing in Civil Engineering*, Reston, VA. (Invited paper for the special issue of the best papers of the 2009 ASCE International Workshop on Computing in Civil Engineering). Vol. 25, No. 6, pp. 457-470, November/December 2011.
59. Chen, A. Y., Peña-Mora, F., and Ouyang, Y. (2011). "A Collaborative GIS Framework to Support Equipment Distribution for Civil Engineering Disaster Response Operations." *Automation in Construction*, Elsevier, Vol. 20, No. 5, pp. 637-648, August 2011.
60. Golparvar-Fard, M., Peña-Mora F., and Savarese S. (2011). "Integrated Sequential As-Built and As-Planned Representation with D4AR Tools in Support of Decision-Making Tasks in the AEC/FM Industry." *ASCE Journal of Construction Engineering and Management*, Vol.137, No. 12, pp. 1099-1116, December 2011.
61. Chen, A. Y., Peña-Mora, F., Mehta, S. J., Plans, A. P., Brauer, B. R., Foltz, S., and Nacheman, S. (2011), "Equipment Distribution for Structural Stabilization and Civilian Rescue." *International Journal of Information Systems for Crisis Response and Management (IJISCRAM)*, Vol. 3, No.1, pp. 19-31, January-March 2011.
62. Golparvar-Fard, M., Bohn, J., Teizer, J., Savarese S., and Peña-Mora, F. (2011). "Evaluation of Image-Based Modeling and Laser Scanning Accuracy for Emerging Automated Performance Monitoring Techniques." *Elsevier Journal of Automation in Construction*, Vol. 20, No. 8, pp. 1143-1155, December 2011.
63. Peña-Mora, F., Thomas, J., Golparvar-Fard, M., and Aziz, Z. (2012). "Supporting Civil Engineers during Disaster Response and Recovery Using a Segway Mobile Workstation Chariot," *ASCE Journal of Computing in Civil Engineering*, Vol. 26, No.3.
64. Chen, A. Y., Han, S., Lee, S. and Peña-Mora, F. (2011) "A Civilian Reporting Service to Guide Converging Resources for Search and Rescue in Disaster Response." *Journal of Construction Engineering and Project Management (JCEPM)*, Vol. 1, No. 3, pp. 45-51.
65. Hajibabai, L., Aziz, Z., and Peña-Mora, F. (2011) "Visualizing Greenhouse Gas Emissions from Construction Activities," *Construction Innovation: Information, Process, Management*, Vol. 11, No. 3, pp. 356 - 370.
66. Han, S., Lee, S., and Peña-Mora, F. (2012) "Identification and Quantification of Non-Value Adding Activities due to Errors and Changes for Designing Robust Construction Project." *ASCE Journal of Construction Engineering and Management*, Reston, VA, Vol. 138, No.1, pp.98-109.
67. Golpavar-Fard, M., Peña-Mora, F., and Savarese, S. (2012). "Automated Model-Based Progress Monitoring Using Unordered Daily Construction Photographs and IFC As-Planned Models." *ASCE Journal of Computing in Civil Engineering*.
68. Golparvar-Fard, M., Peña-Mora, F., and Savarese, S. (2011). "Integrated Sequential As-Built and As-Planned Representation with D4AR Tools in Support of Decision-Making Tasks in the AEC/FM Industry." *ASCE Journal of Construction Engineering Management*, Vol. 137, No. 12, pp. 1099-1116.

69. Song, X., Peña-Mora, F., Menassa, C., and Arboleda, C.A. (2012). "Insurance as a Risk Management Tool for ADR Implementation in Construction Disputes." *ASCE Journal of Construction Engineering and Management*, Vol. 137, No. 1, January 2012, pp. 14-21.
70. Golparvar-Fard, M., Peña-Mora, F., and Savarese, S. (2012) "Automated Progress Monitoring Using Unordered Daily Construction Photographs and IFC-based Building Information Models." *ASCE Journal of Computing in Civil Engineering*.
71. Ahn, C., Peña-Mora, F., Lee, S.H., and Arboleda, C. (2012). "Consideration of the Environmental Cost in Construction Contracting for Public Works: A+C and A+B+C bidding methods." *ASCE Journal of Management in Engineering*, Reston, VA.
72. Mathur, S., Poole, M. S., Peña-Mora, F., Johnson, M., and Contractor, N. (2012). Detecting Interaction Links in a Collaborating Group using Manually Annotated Data. *Social Networks*, Vol. 34, Issue 4, pp 515-526.
73. Chen, A. Y., Peña-Mora, F., Plans, A., Mehta, S., and Aziz, Z. (2012) "Supporting Urban Search and Rescue with Digital Requests of Response Resources." *Advanced Engineering Informatics*, Elsevier.
74. Song, X., Peña-Mora, F., Menassa, C., and Arboleda, C. (2013). "Determining the Optimal Premium for ADR Implementation Insurance in Construction Dispute Resolution." *J. Manage. Eng.*, 10.1061/(ASCE)ME.1943-5479.0000188 (Feb. 18, 2013).
75. Han, S., Lee, S., and Peña-Mora, F. (2013). "Vision-Based Detection of Unsafe Actions of a Construction Worker: Case Study of Ladder Climbing." *J. Comput. Civ. Eng.*, 27(6), 635–644.
76. Han, S., Love, P., and Peña-Mora, F. (2013). "A System Dynamics Model for Assessing the Impacts of Design Errors in Construction Projects." *Mathematical and Computer Modelling*. Volume 57, Issues 9–10, May 2013, Pages 2044–2053
77. Han, S., Saba, F., Lee, S., Mohamed, Y., Peña-Mora, F. (2013) "Toward an Understanding of the Impact of Production Pressure on Safety Performance in Construction Operations, Accident Analysis & Prevention," Available online 19 October 2013, ISSN 0001-4575, <http://dx.doi.org/10.1016/j.aap.2013.10.007>.
78. Ahn, C., Lee, S., and Peña-Mora, F. (2013). "The Application of Low-Cost Accelerometers for Measuring the Operational Efficiency of a Construction Equipment Fleet." *J. Comput. Civ. Eng.*, 10.1061/(ASCE)CP.1943-5487.0000337 (Jun. 15, 2013).
79. Han, S., Lee, S., and Peña-Mora, F. (2013). "Comparative Study of Motion Features for Similarity-Based Modeling and Classification of Unsafe Actions in Construction." *J. Comput. Civ. Eng.*, 10.1061/(ASCE)CP.1943-5487.0000339 (Jun. 20, 2013).
80. Han, S., Achar, M., Lee, S., and Peña-Mora, F. (2013) "Empirical assessment of an RGB-D sensor on motion capture and action recognition for construction worker monitoring" *Visualization in Engineering* 2013, 1:6 (9 July 2013)
81. Han, S., Saba, F., Lee, S., Mohamed, Y., and Peña-Mora, F. (2014) "Toward an understanding of the impact of production pressure on safety performance in construction operations" *Accident Analysis & Prevention* 68, 106-116, 2014
82. Liu, M., Balali, V., Wei, H.H., and Peña-Mora, F.A., 2015. Scenario-based Multi-Criteria Prioritization Framework for Urban Transportation Projects. *American Journal of Civil Engineering and Architecture*, 3(6), pp.193-199.
83. Song, X., Xu, J., Shen, C., Peña-Mora, F., 2016. Conflicts Resolution based Construction Temporary Facilities Layout Planning in Large-scale Construction Projects. *Canadian Journal of Civil Engineering*, 2016/5/18
84. Song, X., Xu, J., Shen, C., Peña-Mora, F., Zeng, Z., 2017. A Decision-Making System for Construction Temporary Facilities Layout Planning in Large-Scale Construction Projects. *International Journal of Civil Engineering*, March 2017, Volume 15, Issue 2, pp 333–353
85. Song, X., Xu, J., Zhang, Z., Shen, C., Xie, H., Peña-Mora, F., 2017. Reconciling strategy towards construction site selection-layout for coal-fired power plants, *Applied Energy*, Elsevier, v. 204, pp. 846-865, 2017/10/15
86. Riaz, Z., Parn, E., Edwards, D., Arslan, M., Shen, C., Pena-Mora, F., 2017. BIM and sensor-based data management system for construction safety monitoring, *Journal of Engineering, Design and Technology*, Emerald Publishing Limited, v. 15, Issue 6, pp. 738-753, 2017/12/4
87. Song, X., Zhong, L., Zhang, Z., Xu, J., Shen, C., Peña-Mora, F., 2017. Multi-stakeholder Conflict Minimization-Based Layout Planning of Construction Temporary Facilities, *Journal of Computing in Civil Engineering*, ASCE, v. 32, Issue 2, 2017/1/2
88. Cui, D., Shen, C., Peña-Mora, F., Chen, J., 2018. Cascading failures to attack edges in interdependent networks, *International Journal of Wireless and Mobile Computing*, v. 14, Issue 3, pp 241-249, <https://doi.org/10.1504/IJWMC.2018.092366>, 2018
89. Song, X., Xu, J., Shen, C., Peña-Mora, F., 2018. Conflict resolution-motivated strategy towards integrated construction site layout and material logistics planning: A bi-stakeholder perspective, *Automation in Construction*, Elsevier, v. 87, pp. 138-157, 2018/3/31

90. Song, X., Z Zhang, J Xu, Z Zeng, C Shen, F Peña-Mora, 2018. Bi-stakeholder Conflict Resolution-Based Layout of Construction Temporary Facilities in Large-Scale Construction Projects, *International Journal of Civil Engineering*, Springer International Publishing, v. 16, pp. 941-964, 2018/8
91. Shen, C., Pena-Mora, F., 2018. Blockchain for Cities—A Systematic Literature Review, *IEEE Access*, V. 16, pp. 76787 - 76819, 2018/11/12
92. Lu, Z., Pena-Mora, F., Wang, SQ., Liu, T., Wu, D., 2019 Assessment Framework for Financing Public-Private Partnership Infrastructure Projects through Asset-Backed Securitization – *ASCE Journal of Management in Engineering*, V. 35, Issue 6, pp. 04019027, 2019/8/8
93. Mao, Q., Li, N., Peña-Mora, F., 2019. Quality function deployment-based framework for improving the resilience of critical infrastructure systems - *International Journal of Critical Infrastructure Protection*, Elsevier, V. 26. Pp. 100304, 2019/9/1
94. Song, X., Peña-Mora, F., Shen, C., Zhang, Z., Xu, J., 2019. Modelling the effect of multi-stakeholder interactions on construction site layout planning using agent-based decentralized optimization - *Automation in Construction*, Elsevier, v. 107, 2019
95. Fang, X.W., Ding, L., Love, P., Luo, H., Li, H., Peña-Mora, F., Zhong, B., Zhou, C., 2020. Computer vision applications in construction safety assurance - *Automation in Construction*, Elsevier, v. 110, 2020
96. Huang, Y., Shi, Q., Pena-Mora, F., Lu, Y., Shen, C., 2020. Exploring the Impact of Information and Communication Technology on Team Social Capital and Construction Project Performance - *Journal of Management in Engineering*, ASCE, v. 36, 2020
97. Lim, HW., Zhang, F., Fang, D., Peña-Mora, F., Liao, PC., 2020. Corporate Social Responsibility on Disaster Resilience Issues by International Contractors - *Journal of Management in Engineering*, ASCE, v. 37, Issue No. 1, January 1, 2021
98. Song, X., Wang, Y., Zhang, Z., Shen, C., Peña-Mora, F., 2021. Economic-environmental equilibrium-based bi-level dispatch strategy towards integrated electricity and natural gas systems - *Applied Energy*, Elsevier, v. 281, 2021
99. Huang, Y., Shi, Q., Zuo, J., Pena-Mora, F., and Chen, J., 2021. Research Status and Challenges of Data-Driven Construction Project Management in the Big Data Context, *Advances in Civil Engineering*, v. 2021, pp. 1-19, April 14, 2021
100. Ma, M., Huang, H., Song, X., Pena-Mora, F., Zhang, Z., and Chen, J., 2021. Optimal sizing and operations of shared energy storage systems in distribution networks: A bi-level programming approach, *Applied Energy*, Elsevier, v. 307, February 2022
101. X Song, H Zhang, L Fan, Z Zhang, F Peña-Mora, 2023. Planning shared energy storage systems for the spatio-temporal coordination of multi-site renewable energy sources on the power generation side, *Energy*, Volume 282, November 2023
102. N Pei, X Song, Z Zhang, F Peña-Mora, 2024. Optimizing the operation and allocating the cost of shared energy storage for multiple renewable energy stations in power generation side, *Energy Conversion and Management*, Volume 302, February 2024

e. Other Publications in Journals

1. Peña-Mora, F., Sriram, D., and Logcher, R., “Design Rationale for Computer Supported Conflict Mitigation - Closure,” *ASCE Journal of Computing in Civil Engineering*, Vol. 10, No. 4, pp. 328-329, October 1996.
2. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: The Engineering Web,” *Editorial Column, IEEE Internet Computing*, Vol. 1, No. 1, pp.72-74, January/February 1997.
3. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: The Spider, Stuck in a Web,” *Editorial Column, IEEE Internet Computing*, Vol. 1, No. 2, pp.47-49, March/April 1997.
4. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: The Collaborating Spider,” *Editorial Column, IEEE Internet Computing*, Vol. 1, No. 3, pp.56-57, May/June 1997.
5. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: Arachnoid Agent, at Your Service,” *Editorial Column, IEEE Internet Computing*, Vol. 1, No. 4, pp.31-32, July/August 1997.
6. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: Stuck in the Mud,” *Editorial Column, IEEE Internet Computing*, Vol. 2, No. 1, pp.70-72, January/February 1998.
7. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: Spider on the Go,” *Editorial Column, IEEE Internet Computing*, Vol. 2, No. 2, pp.94-95, March/April 1998.
8. Filman, R. and Peña-Mora, F., “The Arachnoid Tourist: Web of Frail Delight,” *Editorial Column, IEEE Internet Computing*, Vol. 2, No. 3, pp.84-86, May/June 1998.

9. Filman, R. and Peña-Mora, F., "The Arachnoid Tourist: Seek, and Ye Shall Find," Editorial Column, IEEE Internet Computing, Vol. 2, No. 4, pp.78-83, July/August 1998.
10. Peña-Mora, F. and Park, M., "Dynamic Planning for Fast-Tracking Building Construction Projects- Closure," ASCE Journal of Construction Engineering and Management, Vol. 129, No. 6, pp. 706-706, November-December 2003.

f. Articles in Conference Proceedings

1. Peña-Mora, F., Sriram, D., and Logcher, R., "SHARED-DRIMS: SHARED Design Recommendation-Intent Management System," Proceedings Enabling Technologies Infrastructure for Collaborative Enterprise, Morgantown, WV, IEEE Press, April 1993, pp. 213-221.
2. Peña-Mora, F., Sriram, D., and Logcher, R., "SHARED-DRIMS: A Proactive Project Management System for Conflict Management," IJCAI-93 Workshop on Computational Models of Conflict Management in Cooperative Problem Solving, June 1993.
3. Peña-Mora, F., Sriram, D., and Logcher, R., "Conflict Management Using SHARED-DRIMS," ASCE First Congress on Computing in Civil Engineering, Washington, DC, ASCE Press, New York, NY, June 1994, pp. 1599-1606.
4. Peña-Mora, F., Logcher, R., Mine, N., and McManus, T., "SCHEREC: SCHEDULE RECOVERY system," ASCE First Congress on Computing in Civil Engineering, Washington, DC, ASCE Press, New York, NY, June 1994, pp. 17-24.
5. Ford, D. and Peña-Mora, F., "The Design of a Proactive Cost Feedback System for Construction Project Management," ASCE First Congress on Computing in Civil Engineering, Washington, DC, ASCE Press, New York, NY, June 1994, pp. 1365-1372.
6. Hussein, K., Peña-Mora, F., and Sriram, D., "CAIRO: A System for Facilitating Communication in a Distributed Collaborative Engineering Environment," Proceedings Enabling Technologies Infrastructure for Collaborative Enterprise, Berkeley Spring, WV, IEEE Press, April 1995, pp. 154-162.
7. Peña-Mora, F., "Change Management for Computer Supported Collaborative Design/Manufacturing/Repair," NSF Strategic Planning Workshop for Design Engineering, Phoenix, AZ, May 1995.
8. Peña-Mora, F., Sriram, D., and Logcher, R., "Active Computer Support for Design Rationale Capture," ASCE Second Congress on Computing in Civil Engineering, Atlanta, GA, ASCE Press, Redmond, VA, June 1995, pp. 1453-1460.
9. Peña-Mora, F., Logcher, R. and Mine, N., "Proactive Project Control through an Object-Oriented Database Management System," ASCE Second Congress on Computing in Civil Engineering, Atlanta, GA, ASCE Press, Redmond, VA, June 1995, pp. 696-703.
10. Peña-Mora, F. and Kennedy, J., "Theoretical Foundations for Computer Supported Negotiation," ASCE Third Congress on Computing in Civil Engineering, Anaheim, CA, ASCE Press, Redmond, VA, June 1996, pp. 186-192.
11. Peña-Mora, F. and Hong, C., "Information Technology for Better Management of Change Cost and Schedule in Construction Projects," ASCE Third Congress on Computing in Civil Engineering, Anaheim, CA, ASCE Press, Redmond, VA, June 1996, pp. 613-619.
12. Peña-Mora, F. and Soibelman, L., "A Geographically Distributed Multi-Reasoning Mechanism for Change Negotiation Management of Large-Scale Engineering Systems," Construction on the Information Highway, Bled, Slovenia, CIB Proceedings Publication 198, W78 "Working Commission on Information Technology in Construction" and TG10 "Task Group on Computer Representation of Design Standards and Building Codes," June 1996, pp. 409-422.
13. Peña-Mora, F. and Vadhavkar, S., "Design Rationale and Design Patterns in Reusable Software Design," Artificial Intelligence in Design '96, Stanford, CA, Kluwer Academic Publishers, London, England, July 1996, pp. 251-268.
14. Peña-Mora, F. and Hussein, K., "Change Negotiation Meetings in a Distributed Collaborative Engineering Environment," Information Representation and Delivery in Civil and Structural Engineering Design, Glasgow, UK, Civil-Comp Press, Edinburgh, United Kingdom, August 1996, pp. 29-38.
15. Peña-Mora, F. and Hong, C., "Schedule Analysis and Recovery System," ASCE Fourth Congress on Computing in Civil Engineering, Philadelphia, PA, ASCE Press, Redmond, VA, June 1997, pp. 17-24.
16. Shelden, D., Connor, J., Williams, J., and Peña-Mora, F., "The Collaborative Design Studio at MIT," ASCE Fourth Congress on Computing in Civil Engineering, Philadelphia, PA, ASCE Press, Redmond, VA, June 1997, pp. 403-410.
17. Peña-Mora, F., Field, R., and Gabrielsson, A., "The Dynamic Agenda Planner Tool – Meeting the Collaborative Engineering Demands of the Future," Conference on Concurrent Engineering in Construction, London, UK, July 1997, pp. 241-249.
18. Peña-Mora, F. and Ali-Ahmad, W., "Adaptive Retrieval and Presentation of Information in Preference-Influenced Collaborative Environments," Artificial Intelligence in Design '96, Lisbon, Portugal, Kluwer Academic Publishers, London, England, July 1998, pp. 619-639.

19. Peña-Mora, F., "Adaptive Retrieval and Presentation of Engineering Information," Computing in Civil Engineering, ASCE International Computing Congress, Boston, MA, ASCE Press, Redmond, VA, October 1998, pp. 181-188.
20. Peña-Mora, F., "Collaborative Negotiation for Large Scale Civil Engineering Projects," International Meeting on Artificial Intelligence in Structural Engineering, Ascona, Switzerland, July 1998, pp. 271-294.
21. Soibelman, L. and Peña-Mora, F., "M-RAM: An Artificial Intelligence Distributed System to Support the Conceptual Phase of Structural Design," Civil-Comp99-The Seventh International Conference on Civil and Structural Engineering Computing, Oxford, England, September 1999, pp.13-15.
22. Peña-Mora, F., Strumminger, R., Favella, J., and Losey, R., "Supporting a Real-World Project-Based, Technology Supported Collaborative Distance Learning Environment," ASCE/ICCCBE 2000 Conference in Computing in Civil and Building Engineering, Stanford, CA, ASCE Press, Redmond, VA, August 2000, pp. 170-176.
23. Vadhavkar, S. and Peña-Mora, F., "Geographically Distributed Team Interaction Space," ASCE/ICCCBE 2000 Conference in Computing in Civil and Building Engineering, Stanford, CA, ASCE Press, Redmond, VA, August 2000, pp. 373-379.
24. Park, M. and Peña-Mora, F., "Dynamic Planning and Control of Large Scale Infrastructure Projects," ASCE/ICCCBE 2000 Conference in Computing in Civil and Building Engineering, Stanford, CA, ASCE Press, Redmond, VA, August 2000, pp. 930-939.
25. Gupta, A., Vadhavkar, S., Peña-Mora, F., and Yeung, J., "An Integrated Framework to Support Distributed CAD over the Internet," Enabling Technologies Infrastructure for Collaborative Enterprise, (WET ICE' 01), Cambridge, MA, IEEE Press, June 2001.
26. Park, M. and Peña-Mora, F., "User-Defined Modeling Approach for the Dynamic Planning and Control of Construction Projects," ASCE Special Conference on Fully Integrated and Automated Project Processes in Civil Engineering, Blacksburg, VA, ASCE Press, Redmond, VA, January 2002.
27. Peña-Mora, F., Aldunate, R., and Nussbaum, M. (2002), "Availability Analysis of an Ad-Hoc DSMS for Disaster Relief Environments," In proceedings of the XII International Conference of the Chilean Computer Science Society (SCCC'02), IEEE press, Copiapó, Atacama, Chile, November 6-8, 2002.
28. Lee, S., Peña-Mora, F., and Park, M., "Dynamic Quality and Change Management Framework for Concurrent Design and Construction," Construction Congress Research Conference, ASCE, Hawaii, March 19-21, 2003. (Electronic book)
29. Lee, S., Peña-Mora, F., and Park, M., "Reliability and Stability Buffering Approach in Concurrent Design and Construction Projects," 11th Annual Conference, IGLC (International Group of Lean Construction), Blacksburg, Virginia, July 22-24, 2003.
30. Aldunate, R., Nussbaum, M., and Peña-Mora, F., "An Empirical Wi-Fi Based Location Mechanism for Urban Search and Rescue Operations," Lecture Notes in Computer Science, Springer-Verlag, Vol. 2957, 2004, pp. 48-61.
31. Lee, S., Peña-Mora, F., and Park, M., "Dynamic Error and Change Management in Concurrent Design and Construction," ASCE Construction Research Congress, San Diego, CA, April 5-7, 2005.
32. Han, S., Park, M., and Peña-Mora, F., "Comparative Study of Discrete-Event Simulation and System Dynamics for Construction Process Planning," ASCE Construction Research Congress, San Diego, CA, April 5-7, 2005.
33. Lee, S., Peña-Mora, F., "System Dynamics Approach for Error and Change Management in Concurrent Design and Construction," 2005 Winter Simulation Conference, Institute of Electrical and Electronics Engineers (IEEE), Piscataway, NJ, 2005.
34. Lee, S., Peña-Mora, F., "Latency in Error and Change Management," 11th International Conference on Computing in Civil and Building Engineering, 2006 Joint International Conference on Computing and Decision Making in Civil and Building Engineering, ICCCB-XE, Montreal, Canada, June 14-16, 2006.
35. Lee, S., Peña-Mora, F., "Visualization of Construction Progress Monitoring," 11th International Conference on Computing in Civil and Building Engineering, 2006 Joint International Conference on Computing and Decision Making in Civil and Building Engineering, ICCCB-XE, Montreal, Canada, June 14-16, 2006.
36. Han, S., Peña-Mora, F., Lee, S., Park, M., "Hybrid Strategic and Operational Project Management," 11th International Conference on Computing in Civil and Building Engineering, 2006 Joint International Conference on Computing and Decision Making in Civil and Building Engineering, ICCCB-XE, Montreal, Canada, June 14-16, 2006.
37. Menassa C. and Peña-Mora F., "An Option-Based Model for Evaluating ADR Investments in Design and Construction Projects," 11th International Conference on Computing in Civil and Building Engineering, 2006 Joint International Conference on Computing and Decision Making in Civil and Building Engineering, ICCCB-XE, Montreal, Canada, June 14-16, 2006.
38. Son, J. and Peña-Mora, F., "Improvement of Collaboration among First Responders Including Civil Engineers during Disaster Response in Urban Areas," 11th International Conference on Computing in Civil and Building Engineering,

- 2006 Joint International Conference on Computing and Decision Making in Civil and Building Engineering, ICCCB-XE, Montreal, Canada, June 14-16, 2006.
39. Aldunate, R., Koustoula, D., Peña-Mora, F., and Lakhera, S., "A Decentralized Trust Model to Reduce Information Unreliability in Complex Disaster Relief Operations," Lecture Notes in Computer Science, Springer Berlin /Heidelberg, 2006, Vol. 4200, pp. 383-407.
 40. Tsai, M.-H., Liu, L. Y., Peña-Mora, F., "Designing Building Black-Boxes to Support Disaster Relief Efforts," 19th International Conference on Computer Application in Industry and Engineering, CAINE, Las Vegas, NV, Nov 13-15, 2006.
 41. Lee, S., Peña-Mora, F., "Lessons Learned from Applying System Dynamics to Construction Simulation," 13th EG-ICE Workshop, Ascona, Switzerland, 2006.
 42. Menassa, C. and Peña-Mora, F., "A System Dynamics Model to Evaluate the Impact of Uncertainty on ADR Investments in AEC Projects," 2007 ASCE Construction Research Congress, Grand Bahamas Island, May 6-8, 2007.
 43. Menassa, C. and Peña Mora, F. "An Option Based Dynamic Optimization Model to Evaluate ADR Investments in AEC Construction Projects." Proceedings of the 25th Construction Management and Economics: Past, Present, and Future, Taylor and Francis, London, UK, 2007.
 44. Golparvar-Fard, M. and Peña-Mora, F., "Semi-Automated Visualization Techniques for Construction Progress Monitoring," 2007 ASCE Construction Research Congress, Grand Bahamas Island, May 6-8, 2007.
 45. Bhagnani, K., Lee, S., Peña-Mora, F., Helmes, P., and Fulenwider, M., "Proactive Coordination to Reduce Structural Steel Delays," 2007 ASCE Construction Research Congress, Grand Bahamas Island, May 6-8, 2007.
 46. Han, S., Peña-Mora, F., Lee, S., and Park, M., "Strategic-Operational Project Management for Managing Non-Value Adding Iterations," 2007 ASCE Construction Research Congress, Grand Bahamas Island, May 6-8, 2007.
 47. Tsai, M.-H., Liu, L. Y., and Peña-Mora, F., "A Building Black Box for Supporting Disaster Response and Recovery," 2007 ASCE Construction Research Congress, Grand Bahamas Island, May 6-8, 2007.
 48. Menassa, C. and Peña-Mora, F., "An Option Based Dynamic Optimization Model to Evaluate ADR Investments in AEC Construction Projects," Construction Management and Economics 25th Anniversary Conference, University of Reading, United Kingdom, July 16-18, 2007.
 49. Golparvar-Fard, M., Sridharan, A., Lee, S., and Peña-Mora, F., "Visual Representation of Construction Progress Monitoring Metrics on Time-Lapse Photographs," Construction Management and Economics 25th Anniversary Conference, University of Reading, United Kingdom, July 16-18, 2007.
 50. Lee, S., Peña-Mora, F., Helmes, P., and Fulenwider, M., "Theoretical Framework for Dynamic Project Management," Construction Management and Economics 25th Anniversary Conference, University of Reading, United Kingdom, July 16-18, 2007.
 51. Golparvar-Fard, M. and Peña-Mora, F., "Application of Visualization Techniques for Construction Progress Monitoring," ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July 25-28, 2007.
 52. Menassa, C. and Peña-Mora, F., "An Option Pricing Model to Evaluate ADR Investments in AEC Construction Projects Under Different Scenarios." Proceedings of the 2007 ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July 25-28, 2007, pp.566-574.
 53. Lee, S. and Peña-Mora, F. (2007), "Hybrid System Dynamics and Discrete Event Simulation for Construction Management," Proceedings of the 2007 ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July, 25-28, 2007.
 54. Tsai, M.-H., Liu, L. Y., and Peña-Mora, F. (2007), "A Building Black Box for Urban Disaster Response and Relief," Proceedings of the 2007 ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July, 25-28, 2007.
 55. Chen, A. Y., Tsai, M. H., Lantz, T., Plans, A. P., Mathur, S., Lakhera, S., Kaushik, N., and Peña-Mora, F. "A Collaborative Framework for Supporting Civil Engineering Emergency Response with Mobile Ad-Hoc Networks," Proceedings of the 2007 ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July 25-28, 2007.
 56. Han, S., Lee, S., Golparvar Fard, M., and Peña-Mora, F. (2007), "Modeling and Representation of Non-Value Adding Activities due to Errors and Changes in Design and Construction Projects." 2007 Winter Simulation Conference, IEEE, Washington, D.C., 2007.
 57. Han, S., Lee, S., and Peña-Mora, F. (2008), "Modeling the Dynamics of Non-Value Adding Activities due to Errors and Changes in Design and Construction Projects," 12th International Conference on Computing in Civil and Building Engineering & 2008 International Conference on Information Technology in Construction, Beijing, China, October 16-18, 2008.
 58. Menassa, C. and Peña-Mora, F. (2008). "A Decision Support System Based on Financial Real Options Theory to Analyze Dispute Resolution Investments in AEC Projects." 12th International Conference on Computing in Civil and

- Building Engineering & 2008 International Conference on Information Technology in Construction, Beijing, China, October 16-18, 2008.
59. Han, S., and Peña-Mora, F., "Context-Aware Project Dice Game: Incorporating Management Recovery Actions to Minimize Variation in Construction Performance." 12th International Conference on Computing in Civil and Building Engineering & 2008 International Conference on Information Technology in Construction, Beijing, China, October 16-18, 2008.
 60. Peña-Mora, F., Aziz, Z., Golparvar-Fard, M., Chen, A.Y., Plans, A.P., and Mehta, S.J. "Emerging Technologies To Support Urban Resilience And Recovery," 7th International Symposium on New Technologies For Urban Safety Of Mega Cities In Asia, Beijing, China, October 21-22, 2008.
 61. Chen, A. Y., Peña-Mora, F., Ouyang, Y., and Aziz, Z. "Resource Allocation Using Collaborative GIS to Support Civil Engineering Emergency Response Operations," 12th International Conference on Computing and Building Engineering, 2008 International Conference on Information Technology in Construction, ICCCB E – XII, Tsinghua University, Beijing, China, Oct 16-18, 2008.
 62. Song, X., Peña-Mora, F., Arboleda, C., Conger, R., and Menassa, C. (2009). "The Potential Use of Insurance as a Risk Management Tool for ADR Implementation in Construction Disputes." Accepted for publication and presentation at the 2009 ASCE International Workshop on Computing in Civil Engineering, Austin, TX, June 24-27, 2009.
 63. Song, X., Menassa, C., Peña-Mora, F., and Conger, R. (2009). "Applying Insurance Pricing Models for Pricing Alternative Dispute Resolution as an Insurance Product." Accepted for publication and presentation at the Construction Research Congress (CRC), Seattle, WA, April 5-7, 2009.
 64. Chen, A. Y., Peña-Mora, F. (2009) "Collaborative GIS for Request of Construction Equipment in Disaster Response," ASCE International Workshop on Computing in Civil Engineering, Austin, TX, June 24-27, 2009.
 65. Peña-Mora, F., Ahn, C., Golparvar-Fard, M., Hajibabai, L., Shiftehfar, S., An, S., Aziz, Z., and Song, S.H. (2009) "A Framework for Managing Emissions during Construction," Proc., Int. Conference and Workshop on Sustainable Green Building Design and Construction, National Science Foundation, 2009.
 66. Golparvar-Fard, M., Savarese, S., and Peña-Mora, F. (2009) "Interactive Visual Construction Progress Monitoring with 4D Augmented Reality Model", Proc., Construction Research Congress, Seattle, WA, April 4-7, 2009.
 67. Roh S., Peña-Mora, F., Golparvar-Fard, M., and Han, S. (2009) "Visualization Application for Interior Progress Monitoring in 3D Environment", Proc., Construction Research Congress, Seattle, WA, April 5-7, 2009.
 68. Golparvar-Fard, M., Peña-Mora, F. and Savarese, S. (2009) "Sparse Reconstruction and Geo-Registration of Daily Site Photographs for Representation of As-Built Construction Scene and Automatic Construction Progress Data Collection," Proc., 2009 International Symposium on Automation and Robotics in Construction, Austin, TX, June 24-27, 2009.
 69. Golparvar-Fard, M., Peña-Mora F., and Savarese, S. (2009) "Monitoring of Construction Performance Using Daily Progress Photograph Logs and 4D As-Planned Models", Proc., 2009 ASCE International Workshop on Computing in Civil Engineering, Austin, TX, June 24-27, 2009.
 70. Roh, S. and Peña-Mora, F. (2009), "3D Walk-through Environmental Model for Visualization of Interior Construction Progress Monitoring," The 3rd International Conference on Construction Engineering and Management (ICCEM) and the 6th International Conference on Construction Project Management (ICCPM), Jeju, Korea, May 27-30, 2009.
 71. Han, S., Peña-Mora, F., Golparvar-Fard, M., and Roh, S. (2009). "Application of a Visualization Technique for Safety Management," ASCE International Workshop on Computing in Civil Engineering, Austin, TX, June 24-27, 2009.
 72. Golparvar-Fard M., Peña-Mora, F., and Savarese S. (2009). "Automated model-based progress monitoring using unordered daily construction photographs and IFC as-planned models." Proc., 2009 Canadian Construction Research Forum, Banff, AB, Aug. 2009.
 73. Peña-Mora, F., Ahn, C., Golparvar-Fard, M., Hajibabai, L., Shiftehfar, S., An, S., Aziz, Z., and Song, X. (2009) "A Framework for Managing Emissions during Construction," International Conference and Workshop on Sustainable Green Building Design And Construction, Cairo, Egypt.
 74. Ahn, C., Rekapalli, P. V., Martinez, J. C., Peña-Mora, F. (2009) "Sustainability Analysis of Earthmoving Operations." Proceedings of the 41st Conference on Winter Simulation, Austin, TX, Dec 13, 2009.
 75. Ahn, C., Xie, H., Lee, S.H., Abourizk, S., and Peña-Mora, F. (2010) "Carbon Footprints Analysis for Tunnel Construction Processes in the Preplanning Phase Using Collaborative Simulation." Construction Research Congress 2010, Banff, AB, Canada, May 8, 2010.
 76. Song, X., Peña-Mora, F., and Arboleda, C. (2010), "The Calculation of Optimal Premium in Pricing ADR as an Insurance Product." The International Conference on Computing in Civil and Building Engineering (ICCCBE), and XVII European Group for Intelligent Computing in Engineering (EG-ICE) Workshop, Nottingham, UK, June 30-July 2, 2010.

77. Song, X., Peña-Mora, F., and Arboleda, C. (2010). "The Application of Utility Theory in The Decision-Making Process for Investing in ADR Insurance," Innovation for Reshaping Construction Practice, Construction Research Congress, Banff Alberta, Canada, May 8-11, 2010.
78. Han S., Lee, S., and Peña-Mora, F. (2010). "Framework for a Resilience System in Safety Management: A Simulation and Visualization Approach," The International Conference on Computing in Civil and Building Engineering (ICCCBE), and XVII European Group for Intelligent Computing in Engineering (EG-ICE) Workshop, Nottingham, UK, June 30-July 2, 2010.
79. Han S., Lee, S., and Peña-Mora F. (2010). "System Dynamics Modeling of Safety Culture based on Resilience Engineering," Innovation for Reshaping Construction Practice, Construction Research Congress, Banff Alberta, Canada, May 8-11, 2010.
80. Ahn, C., Rekapalli, P. V., Martinez, J. C., and Peña-Mora, F. (2009) "Sustainability Analysis of Earthmoving Operations." Proceedings of the 41st Conference on Winter Simulation, Austin, TX, Dec 13, 2009.
81. Ahn, C., Pan, W., Lee, S.H., and Peña-Mora, F. (2010). "Enhanced Estimation of Air Emissions from Construction Operations Based on Discrete-Event Simulation." The International Conference on Computing in Civil and Building Engineering (ICCCBE) 2010, Nottingham, U.K., Jun 30-July 2, 2010.
82. Peña-Mora, F., Ahn, C., Golparvar-Fard, M., Hajibabai, L., Shiftehfar, S., An, S., Aziz, Z., and Song, X. (2010) "A Framework for Managing Emissions during Construction," International Conference and Workshop on Sustainable Green Building Design And Construction, Cairo, Egypt, 2010.
83. Ahn, C., Pan, W., Lee, S., and Peña-Mora, F. "Lessons Learned from Utilizing Discrete-Event Simulation Modeling for Quantifying Construction Emissions in Pre-Planning Phase." 2010 Winter Simulation Conference, Institute of Electrical and Electronics Engineers (IEEE), Piscataway, NJ. (Invited Paper), 2010.
84. Chen, A. Y. and Peña-Mora, F. (2010), "Automation for Construction Equipment Request and Deployment for Emergency Response." The International Conference on Computing in Civil and Building Engineering (ICCCBE), and XVII European Group for Intelligent Computing in Engineering (EG-ICE) Workshop, Nottingham, UK, June 30-July 2, 2010.
85. Chen, A. Y. and Peña-Mora, F. (2010), "A Heuristic Process Inspired by Foraging of Honeybees for Equipment Distribution in Disaster Response." The 6th International Conference on Innovation in Architecture, Engineering, and Construction (ACE), State College, PA, June 9-11, 2010.
86. Chen, A. Y. and Peña-Mora, F. (2010), "A GIS Approach to Construction Equipment Request and Deployment during Emergency Response." Innovation for Reshaping Construction Practice, Construction Research Congress, Banff Alberta, Canada, May 8-11, 2010.
87. Chen, A. Y., Peña-Mora, F., Mehta, S. J., Plans, A. P., Brauer, B. R., Foltz, S., and Nacheman, S. (2010), "A GIS Approach to Equipment Allocation for Structural Stabilization and Civilian Rescue." The 7th International Conference on Information Systems for Crisis Response and Management (ISCRAM), Seattle, WA, May 2-5, 2010.
88. Shiftehfar, R., Golparvar-Fard, M., Peña-Mora, F., Karahalios K., and Aziz, Z. (2010). "Application of Visualization for Construction Emission Monitoring." Proc., Construction Research Congress, Banff, Canada, May 8-11, 2010.
89. Golparvar-Fard, M., Savarese, S. and Peña-Mora, F. (2010). "Automated Model Component-Based Recognition of Progress Using Daily Construction Photographs and 4D IFC-Based Models." Proc., Construction Research Congress, Banff, Canada, May 8-11, 2010.
90. Golparvar-Fard, M., Savarese, S., and Peña-Mora, F. (2010). "Model-Based Detection of Progress Using D⁴AR - A 4-Dimensional Augmented Reality-Models Generated by Daily Site Photologs and Building Information Models." The International Conference on Computing in Civil and Building Engineering (ICCCBE), and XVII European Group for Intelligent Computing in Engineering (EG-ICE) Workshop, Nottingham, UK, June 30-July 2, 2010.
91. Golparvar-Fard, M., Thomas J., Peña-Mora, F., and Savarese, S. (2010). Remote Assessment of Pre- and Post-Disaster Critical Physical Infrastructures Using Segway Mobile Workstation Chariot and D⁴AR – 4D Augmented Reality – Models." The International Conference on Computing in Civil and Building Engineering (ICCCBE), and XVII European Group for Intelligent Computing in Engineering (EG-ICE) Workshop, Nottingham, UK, June 30-July 2, 2010.
92. Golparvar-Fard, M., Peña-Mora, F., and Savarese, S. (2010). "D⁴AR – 4 Dimensional Augmented Reality - Tools for Automated Remote Progress Tracking and Support of Decision-Enabling Tasks in the AEC/FM Industry." The 6th International Conference on Innovations in AEC Special Session - Transformative machine vision for AEC, State College, PA, June 9-11, 2010. (**Best Student Paper Award**).
93. Ahn, C., Lee, S.H., and Peña-Mora, F. (2011). "The Opportunities and Challenges for Contractual Consideration of Construction-Related Carbon Emissions from Civil Infrastructure Projects." The Fourth International Conference on Construction Engineering and Project Management, Sydney, Australia, February 16-18, 2011.

94. Song, X., Liang, W., Arboleda, C., Wang, S., and Peña-Mora, F. (2011), " Case Study of The National Stadium: Risks and Opportunities in China's PPP Implementation in Major Sports Facilities." The Fourth International Conference on Construction Engineering and Project Management, Sydney, Australia, February 16-18, 2011.
95. Chen, A. Y. and Peña-Mora, F. (2011), "The Potential Use of a Public Web Service to Guide Converging Construction Equipment in Urban Search and Rescue." (Excellent Paper Award) The 4th International Conference on Construction Engineering and Project Management, Sydney, February 16-18, 2011.
96. Ahn, C., Lee, S.H., and Peña-Mora, F. (2011). "Carbon Emissions Quantification and Verification Strategies for Large-scale Construction Projects." International Conference on Sustainable Design and Construction (ICSDC), Kansas City, Missouri, USA, March 23- 25, 2011.
97. Song, X., Menassa, C., Arboleda, C.A., and Peña-Mora, F. (2011). "Analysis of Critical Parameters in the ADR Implementation Insurance Model." 2011 ASCE International Workshop on Computing in Civil Engineering, Miami, FL. June 19-22, 2011.
98. Han, S., Lee, S., and Peña-Mora, F. (2011). Application of Dimension Reduction Techniques for Motion Recognition: Construction Worker Behavior Monitoring. 2011 ASCE International Workshop on Computing in Civil Engineering, Miami, FL, June 19-22, 2011.
99. Chen, A. Y. and Peña-Mora, F. (2011), "Coordination of Converging Construction Equipment in Disaster Response." 2011 ASCE Workshop of Computing in Civil Engineering, Miami, FL, June 19-22. 2011.
100. Han, S., Lee, S., and Peña-Mora, F. (2012). Vision-based Motion Detection for Safety Behavior Analysis in Construction. Construction Research Congress (CRC) 2012, West Lafayette, IN, May 21-23, 2012.
101. Song, X., and Peña-Mora, F. (2012) "Introducing the Concept of Emissions Liability Insurance in Managing Greenhouse Gas (GHG) Emissions and Promoting Sustainability in Construction Projects" Construction Research Congress (CRC) 2012, West Lafayette, IN, May 21-23, 2012.
102. Ahn, C., Lee, S., and Peña-Mora, F. (2012) Monitoring System for Operational Efficiency and Environmental Performance of Construction Operations Using Vibration Signal Analysis. Construction Research Congress 2012: pp. 1879-1888. doi: 10.1061/9780784412329.189
103. Golparvar-Fard, M., Dimitrov, A., and Peña-Mora, F. (2012). "Robust Material Recognition for Automated Semantically-Rich 3D Modeling." ISG*ISARC 2012, Eindhoven, The Netherlands, June 26-29, 2012.
104. Han, S., Lee, S., and Peña-Mora, F. (2012). A Machine-Learning Classification Approach to Automatic Detection of Workers' Actions for Behavior-based Safety Analysis. 2012 ASCE International Workshop on Computing in Civil Engineering, FL., June 17-20, 2012 (Best Conference Paper Award from the ASCE Visualization, Information Modeling, and Simulation (VIMS) Committee).
105. Ahn, C., Lee, S., and Peña-Mora, F. (2013) Accelerometer-Based Measurement of Construction Equipment Operating Efficiency for Monitoring Environmental Performance. 2013 ASCE International Workshop on Computing in Civil Engineering, June 23-25, 2013, University of Southern California, Los Angeles, CA, USA
106. Lu, Z., Peña-Mora, F., Wang, X., and Shen, Q. (2015) Social Impact Project Finance: an innovative and sustainable infrastructure financing framework. 2015 Creative Construction Conference, June 21-24, 2015, Krakow, Poland
107. Riaz, Z., Arslan, M., and Peña-Mora, F., (2015) "Challenges in Data Management When Monitoring Confined Spaces Using BIM and Wireless Sensor Technology" Computing in Civil Engineering 2015: pp. 123-130.
108. Shen, C., Riaz, Z., Palle, M., Jin, Q., and Peña-Mora, F., (2015) "Open Data Landscape: A Global Perspective and a Focus on China" Open and Big Data Management and Innovation Volume 9373 of the series Lecture Notes in Computer Science pp 247-260
109. Lu, Z, Peña-Mora, F, Wang, XR, Shen, CQ, and Riaz, Z (2015) "Social impact project finance: An innovative and sustainable infrastructure financing framework"- Procedia Engineering, 2015 Volume 123, 2015, pp 300–307
110. Aldunate R.G., Pena-Mora F., Nussbaum M., Valenzuela A., Navarro C. (2016) Self-organizing Connectivity for Mobile Agents in Dynamical Environments. In: García C., Caballero-Gil P., Burmester M., Quesada-Arencibia A. (eds) Ubiquitous Computing and Ambient Intelligence. UCAMi 2016. Lecture Notes in Computer Science, vol 10070. Springer, Cham
111. Song, X., Qiu, R., Shen, C., Peña-Mora F. (2016) "Resource Conflict Identification-Resolution-Based Construction Temporary Facilities Layout Framework in a Dam Construction Project" Proceedings of the Tenth International Conference on Management Science and Engineering Management Volume 502 of the series Advances in Intelligent Systems and Computing, pp 1427-1437
112. Song, X, Shen, C., Zhong, L., Pena-Mora, F., (2017) "SEM-Based Value Generation Mechanism from Open Government Data in Environment/Weather Sector" International Conference on Management Science and Engineering Management, Lecture Notes on Multidisciplinary Industrial Engineering, Springer, Cham, pp. 351-366

113. Mao, Q, Li, N., Peña-Mora, F. (2018) "Quality Function Deployment Based Conceptual Framework for Designing Resilient Urban Infrastructure System of Systems" Workshop of the European Group for Intelligent Computing in Engineering, Lecture Notes in Computer Science, 472-487, 2018/6/10

B. Other (patents, bulletins, reports, magazine articles, etc.)

a. Patents and Patent Applications Pending:

1. Hussein, K. and Peña-Mora, F., "Collaborative Agent Interaction Control and Synchronization System," MIT Case No. 8376S, Daly, Crowley & Mofford, LLP file MIT-057AUS, US Patent Application No. 09/540,947, Issued February 28, 2006.
2. Peña-Mora, F. and Kuang, C., "Mechanisms and Artifacts to Manage Heterogeneous Platform Interfaces in a Collaboration," MIT Case No. 9249S, Daly, Crowley & Mofford, LLP file MIT-057BUS, US Patent Application No. 10/069,885, Issued January 9, 2007.
3. Peña-Mora, F., Vadhavkar, S., Dwivedi, G., Kuang, C., and Wang, W., "Software Service Handoff Mechanism with A Performance Reliability Improvement Mechanism (PRIM) for a Collaborative Client-Server System," MIT Case No. 9250S, Daly, Crowley & Mofford, LLP file MIT-092AUS, US Patent Application No. 10/069,797, Issued May 15, 2007.
4. Peña-Mora, F., Park, M., Lee, S., Fulenwider, M., and Li, M. "Dynamic Planning Method and System," MIT Case No. 9185S, Daly, Crowley & Mofford, LLP file MIT-086AUS, US Patent Application No. 10/068,119, US Patent No. 7,349,863, Issued March 25, 2008.
5. Peña-Mora, F., Park, M., Lee, S., Fulenwider, M., and Li, M. "Reliability Buffering Technique Applied to a Project Planning Model," MIT Case No. 9186S, Daly, Crowley & Mofford, LLP file MIT-087PUSP, US Patent No. 7,415,393, Issued August 19, 2008.
6. Golparvar-Fard M., Peña-Mora, F., and Savarese, S. "Four-Dimensional Augmented Reality Models for Interactive Visualization and Automated Construction Progress Monitoring." University of Illinois Case, Brinks, Hofer, Gilson, & Lione Attorney Docket No. 30831.15 (L0014), US Patent No. 9,070,216, Issued June 30, 2015.
7. Thomas J., Peña-Mora, F., and Golparvar-Fard, M. (2009). "Mobile Workstation Chariot." Provisional Patent, U. S. Patent and Trademark Office (Docket Number: TF08208-PRO).

b. Reports

1. Logcher, R., and Peña-Mora, F. "Phase I Report on Cooperative Research on Construction Production Monitoring and Control," **IESL Report No. 90-04**, Intelligent Engineering Systems Laboratory, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, August 1990.
2. Peña-Mora, F. and Leroux, R., "Unexplored Aspects in SCHEREC, an Intelligent Schedule Recovery," **IESL Report No. 93-26**, Intelligent Engineering Systems Laboratory, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, August 1993.
3. Peña-Mora, F. and Brunet, F., "Connection of SCHEREC with Commercial Cost Databases and Scheduling Programs," **IESL Report No. 95-04**, Intelligent Engineering Systems Laboratory, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, May 1995.
4. Peña-Mora, F. and Ooi, C., "Machine Learning Applications in Civil Engineering," **IESL Report No. 95-05**, Intelligent Engineering Systems Laboratory, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, May 1995.
5. Peña-Mora, F. and Rodriguez, S., "Review of Qualitative Reasoning, Neural Networks, and Genetic Algorithms for Large Scale Engineering Negotiations," **IESL Report No. 95-06**, Intelligent Engineering Systems Laboratory, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, September 1995.
6. Peña-Mora, F., Ali-Ahmad, W., Chen, H., Hussein, K., Kennedy, J., Soibelman, L., and Vadhavkar, S., "The Da Vinci Agent Society Initiative Progress Report as Fall 1996", **IESL Report No. 96-06**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, November 1996.
7. Peña-Mora, F. and Vadhavkar, S. "Design Rationale and Design Patterns in Reusable Software Design," **IESL Report No. 96-07**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, November 1996.

8. Peña-Mora, F. and Hussein, K. "Towards an Effective Distributed Collaborative Design Meeting Environment," **IESL Report No. 96-08**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, November 1996.
9. Peña-Mora, F. and Soibelman, L. "A Meta-Representation for Design Change Negotiation on Large Scale Engineering Systems in a Geographically Distributed Multi-Reasoning Mechanism," **IESL Report No. 96-09**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, November 1996.
10. Peña-Mora, F. and Soibelman, L. "Machine-Learning Algorithms and Reasoning Mechanisms Applications for Change Negotiation in Large Scale Construction Projects," **IESL Report No. 96-10**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, November 1996.
11. Peña-Mora, F., Vadhavkar, S., and Dirisala, S., "Towards A Computer-Based Assistant for Reusable Software Design," **IESL Report No. 97-16**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, November 1997.
12. Peña-Mora, F. and Chiou, Y., "Schedule Analysis and Recovery that Integrates Physical Representation of a Product with its Cost Information **IESL Report No. 98-3**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, January 1998.
13. Peña-Mora, F. and Soibelman, L., "Distributed Multi-Reasoning Mechanisms for the Design of Large-Scale Engineering Systems," **IESL Report No. 98-9**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, June 1998.
14. Peña-Mora, F. and Wang, W., "QoS for Interactive Collaborative Applications on a Dynamic Wireless Network," **IESL Report No. 01-5**, Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, June 1998.
15. Peña-Mora, F. and Fu, L. "Adaptation of the CAIRO Distributed Meeting Environment towards Military Collaboration Efforts," **IESL Report No. 99-7** Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, May 1999.
16. Peña-Mora, F. and Mills, J. "Component-Based Architecture for Online Collaborative Mission Planning Environments," **IESL Report No. 00-5** Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, May 2000.
17. Peña-Mora, F. and Kuang, C. "Interactive Collaborative Environments," **IESL Report No. 01-6** Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, January 2001.
18. Peña-Mora, F. and Dwivedi, G. "Multiple Device Collaborative Environments," **IESL Report No. 01-7** Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, January 2001.
19. Peña-Mora, F. and Vadavakar, S. "Interaction Space," **IESL Report No. 01-11** Intelligent Engineering Systems Laboratory, Engineering System Group, Henry L. Pierce Laboratory, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, July 2001.

11. Grants, contracts, and gifts received for your research and teaching

Research and teaching work funded by nearly \$10 million in industry and government grants including from the National Science Foundation; Draper Laboratory; Province of Mendoza; Sloan Fund; Central Artery; Tren Urbano; PEER; ECSEL; Alliance for Global Sustainability; Pen-Op; Ford Motor Co.; Motorola; Microsoft; NCSA; Sanjian Nantong No.3; HE Family; Barrington Consulting/ TDRC Intec; ZHAO Fund; Ferry Fund; Cordell Hull; Marion and Jasper Whiting Foundation; Kajima Corporation; Shimizu Corporation.

12. Areas of Research

- a. Construction Management; Project Management; Collaboration; Change Management; Conflict Resolution; Support Systems for the Development of Large-Scale Engineering/Civil Infrastructure Projects

- b. Information Technology Support for Collaboration in Preparedness, Response, and Recovery during Disasters Involving Critical Physical Infrastructures
- c. Intelligent and Integrated Sustainable Construction and Sustainable Urbanization

13. Graduate Thesis Research Advising

Summary

	<u>Total</u>	<u>Completed</u>	<u>In Progress</u>
Master of Engineering	28	28	0
Master of Science	32	32	0
Doctoral Students, as Supervisor	14	14	0
Doctoral Students, as Reader	28	27	1
Post-Doctoral Associates	7	7	0

14. Editorships of Journals or Other Learned Publications

Has been on the editorial board for several journals and conferences, including IEEE Computer Society “Internet Computing” Magazine; International Journal of Computer-Integrated Design and Construction; ASCE Journal of Computing in Civil Engineering; ASCE Journal of Computing in Civil Engineering; ASCE Journal of Construction Engineering and Management; Journal of Information Technology in Construction; ASCE Journal of Computing in Civil Engineering; Journal of Construction Engineering and Management; Revista Ingeniería de Construcción; International Journal of Architecture, Engineering, and Construction; Chinese Academy of Engineering Frontiers of Engineering Management.

15. Other Scholarly Activities

Chair of several conferences, programs, workshops, planning committees, organizing committees, scientific committees, technical committees including IEEE WET-ICE: Infrastructure for Collaborative Enterprises, American General Contractor Association/Boston Society of Architects (AGC/BSA) Information Technology Task, Force Sub-Committee on IT Implementation American Society of Civil Engineers/International Society for Computing in Civil and Building Engineering (ASCE/ICCCBE), ASCE International Conference on Computing in Civil Engineering, ASCE Construction Research Congress, ASCE International Workshop on Computing in Civil Engineering, NSF Workshop Construction in the XXI Century, ASCE International Workshop on Computing in Civil Engineering, ASCE International Conference in Sustainable Infrastructure, Proposal Preparation Workshop for NSF's Division of Civil & Mechanical Systems & Information Systems Program, Conference on Concurrent Engineering in Construction

Member of several planning committees and review committees including NSF Strategic Planning Workshop for Information Technology and Organizations Program; NSF Strategic Planning Workshop for Design Engineering; Committee to Review and Provide Recommendations for the Improvement of NSF Programs; Ford Foundation Fellows Conference; Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises; International Conference on Information Technology in Civil and Structural Engineering Design; Conference on Concurrent Engineering in Construction; International Conference on Information Technology in Civil and Structural Engineering Design; ASCE Congress on Computing in Civil Engineering

Reviewer for several journals and conferences including: ASCE Journal of Computing in Civil Engineering, ASCE Journal of Construction Engineering and Management, ASME Journal of Mechanical Design, Microcomputer in Civil Engineering, Journal of Advances in Engineering Software, Artificial Intelligence for Engineering Design, Analysis and Manufacturing, AI in Engineering Journal, CERA Special Issue on Multi-Agent Systems in Concurrent Engineering, Communications of the ACM, AI for Engineering Design Analysis and Manufacturing Computer-Aided Civil and Infrastructure Engineering Journal of Computer-Aided Civil and Infrastructure Engineering, Journal of Advances in Engineering Software, International Journal of Computer-Integrated Design and Construction, International Research Journal of Automation in Construction, International Conference on Information Technology in Civil and Structural Engineering Design, Conference on Concurrent Engineering in Construction, ASCE/ICCCBE Computing Conference, AI in Design.

Multiple committees at the New York City government level, including coastal resiliency, housing restoration, universal pre-kindergarten, homelessness, emergency contracts, sustainability, and others.

16. Service

a. Professional Society

Served and have been involved in several professional organizations including American Society of Civil Engineering (ASCE); 1996-1998 IEEE Computer Society Editorial Board Member IEEE Computer Society “Internet Computing” Magazine; 2004-2009 George E. Brown Network for Earthquake Engineering Simulation (NEES); Society for Advancement of Chicanos and Native American in Sciences (SACNAS); Society for Professional Hispanic Engineers (SHPE); Sigma Xi; New York Academy of Sciences; Association for Computing Machinery (ACM); American Society of Engineering Education (ASEE); Dominican Board of Engineers and Architects (CODIA)

b. University

Served and have been involved in several university committees and initiatives including 1991-1995 MIT Minority Recruitment; 1993 MITES Program Evaluation; 1993-1994 MIT CEE Strategic Planning Committee; 1995-1997 MIT Freshman Advising; 1996-2003 MIT CEE Computer Committee; 1996-2000 MIT SDM; 1996-2003 Co-Director MIT IESL; 1997-1999 MIT CEE Curriculum Development; 1999-2003 MIT CEE Textbook Development Committee; 2000-2003 MIT CEE Graduate Education Committee; 2000-2003 MIT ESG PhD Admission Committee; 2000-2003 MIT ESG PhD Qualifier Exam Administrator; 2001-2003 MIT CEE Textbook Series Editorial Board; 2002-2003 MIT CEE UROP Coordinator; 2004-2005 UIUC CEE Advisory Committee; 2004-2005 UIUC CEE Department Head Search; 2004 UIUC CEE Administrative Committee; 2005-2006 UIUC CEE CM Faculty Search; 2006-2007 UIUC Working Group on Inclusion and Diversity; 2006 UIUC Provost Academic Advising Committee; 2006-2007 UIUC Graduate College EOP Review Committee; 2006-2007 UIUC Graduate College Fellowship Board; 2006-2007 UIUC Provost Budget Model Working Group ICR Sub-Committee; 2006-2007 UIUC Provost Enrollment Management Committee; 2007-2008 UIUC Provost Office Staff - Dean of College of Law Search; 2007-2008 UIUC Illinois Undergraduate Experience Committee; 2007-2008 UIUC Summer Program Working Group; 2006-2009 UIUC Technical System Program in ILIR; 2006-2009 UIUC CEE P&T Committee ; 2006-2009 UIUC Co-Chair - Chancellor’s Diversity Initiatives Committee; 2006-2009 UIUC Provost P&T Reform Committee; 2007-2009 UIUC University Lead - Interdisciplinary Consortium; Transfer Initiative Working Group; 2007-2009 UIUC Interdisciplinary UG Degrees Working Group; 2007-2009 UIUC Accreditation Self-Study Report: Transformative; Learning Environment Committee; 2007-2009 UIUC General University Policy Committee; 2007-2009 UIUC Co-Chair- Faculty ePortfolio/P&T ePortal; 2007-2009 UIUC Co-Chair – Institutional Entrepreneurship @ Illinois; 2008-2009 UIUC Illinois-Lumina Foundation Transfer Initiative; 2009-2012 Columbia University Council of Deans; 2009-2012 Columbia University Housing Priority Committee; 2009-2012 Columbia University North West Corner Executive Committee; 2009-2012 Dean’s Executive Committee; 2009-2012 Dean’s Faculty Advisory Committee; 2009-2012 Dean’s Academic Advisory Committee; 2009-2012 NSF IGERT Committee; 2009-2012 Capital BISS

c. External

Member of several national and international board, delegations and panels including: 2023-present, American Society of Civil Engineers President-Elect; 2019-2023 Health and Hospitals Board; 2014-2023 ACE Mentorship Program; 2019-2022, American Society of Civil Engineers Board of Direction; 2010- 2023 Chiang Chen Industrial Charity Foundation; 2014-2015 NYBC Innovation Taskforce; 2014-2017 Center for Active Design; 2016-2018 NYBC Council on Innovation; 2016-2018 CIOB New York Group; NSF-World Bank-United Nations Workshop on IT and Sustainability, Bangalore, India; NSF-Argentina and Chile Collaborative Research on Computer Science and Computer Engineering; US-European Summit on Science, Technology, and Sustainable Economic Growth; “Minority and Women Perspective,” NAS/NAE/IOM Committee on Science, Engineering, and Public Policy (COSEPUP) “Reshaping the Graduate Education of Scientists and Engineers” Study; Committee of Visitors for NSF CISE Directorate/IEA Division; “Perspectives from Leading Interdisciplinary Researchers” National Academies Convocation on Facilitating Interdisciplinary Research Washington DC; Design Committee of the Justice Implementation Task Force on Closing Down Rikers Jail Complex.

Reviewer for several funding agencies including NSF Information Technology and Organizations Program, NSF Information and Data Management Program, NSF Civil & Mechanical Systems Program, NSF Minority Institution Instrumentation Grant, NSF Integrative Graduate Education, and Research Training in the Experimental Software Systems Program, NSF Information Technology and Organizations Program, NSF CAREER on Education Practice Grant, NSF National Earthquake Engineering Simulation (NEES) Program, NSF Educational Practice Program, Kansas Defense 2000 *DEPSCoR*, Stanford University, UT Sydney, Australia, CONICYT, National Fund for Science and Technology (FONDECYT), Chile.

Participant in several initiatives for NSF and minority recruitment for science and engineering, including NSF Strategic Planning Workshop for Design Engineering, NSF Strategic Planning Workshop for Information Technology and Organizations Program, NSF Civil & Mechanical Systems Workshop for Minority and Women Retention in Engineering, NSF-CMS Workshop For Engineering Educators, ASEE Workshop on the Retention of Women and Minority in Engineering.

d. Other Outside Service

Participated in several professional development and leadership programs, including How To Speak: A Workshop; Faculty Retreat on Active Learning; International Studies Program Workshop; CIC Senior Leadership Seminar Series; A Leaders Guide to Managing at the University of Illinois; Harvard Institute for Higher Education: Institute for Management and Leadership in Education; American Council on Education: ACE Fellows Program (class of Fellows 2009-2010 but differed due to being selected as Dean of The Fu Foundation School of Engineering and Applied Science, Columbia University).