DEAN FENIOSKY PENA-MORA BIOGRAPHICAL DATA
THE FU FOUNDATION SCHOOL OF ENGINEERING AND APPLIED SCIENCE
COLUMBIA UNIVERSITY

Date: September 21, 2009

1. **Name:** Peña-Mora, Feniosky Avelhermí

                                                      Citizenship USA

2. **Present Academic Rank:** Dean   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	Feb. 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
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	Loughborough U.	July 2006 - July 2007
Visiting Professor	EPFL	July 2006 - July 2006
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 Gutgsell Endowed Professor	UIUC	January 2008 - July 2009
Morris A. and Alma	Columbia Uni.	July, 2009 – Present

Schapiro Professor of Engineering Professor, Department of Civil Engineering and Engineering Mechanics	Columbia Uni.	July, 2009 – Present	
Professor, Department of Earth and Environmental Engineering	Columbia Uni.	July, 2009 – Present	
Professor, Department of Computer Science	Columbia Uni.	July, 2009 – Present	

* During the Postdoctoral Associate tenure, I was 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	Asst. to Director	Boston, MA, USA	Sept. 1994 - June 1995

b. Major Consulting Activities

Peña Alcántara Consultants	Boston, MA, USA	Jan. 1995 - present
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 Millions in angel investments

c. Professional Registrations

Registered Professional Civil Engineer, Dominican Republic, Exequatur 411, Sept. 7th 1988, No. 7986

8. Honors, Recognition and Outstanding Achievements

a. Teaching

UNPHU* Honor Board	1982 - 84, 1985 - 87
Dominican Board of Universities Academic Excellence Award	Nov. 1987
Valedictorian, UNPHU* Engineering School	Nov. 1987
Magna Cum Laude Bachelor's Degree UNPHU	Nov. 1987
Magna Cum Laude Post-Graduate Degree UNPHU	April 1988
Ford Foundation Fellowship	1991 - 1994
NSF Minority Fellowship Honorable Mention	1991 - 1992

b. Research

ASCE Journal of Computing in Civil Engineering Best Paper Award	1995
Gilbert W. Winslow Career Development Chair	1996 - 1998
James H. Ferry Fund Award	1997 - 1999
Marion and Jasper Whiting Foundation Fellowship	1997 - 1998
Cordell W. Hull New Initiatives in Engineering Education Award	1998 - 1999
NSF CAREER Award	1999 - 2003
White House PECASE Award	1999 - 2004
W. E. O'Neil Faculty Scholar	2003 - 2007
Caterpillar Lecture, University of Iowa	2003
Plenary Speaker, National Academy of Engineering Frontiers of Engineering Symposium, Irvine, CA	2003
Keynote Speaker, ASCE 2003 Convention, Information Technology in Civil Engineering Conference, Nashville, TN	2003
Caterpillar Lecture, University of Iowa *(distinguished)*	2003
Plenary Speaker, National Academies Convocation on Facilitation Interdisciplinary Research, Washington DC	2004
Dean's Distinguished Lecture, Rice University	2005
Walter L. Huber Civil Engineering Research Prize	2007
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	2008

c. **Public Service**

FACTUAL INFORMATION

A.   **Resident Instruction and Continuing Education**

1.   **Resident Instruction**

Term	Subject Number	Title	Role
FT92	6.001	Structure and Interpretation of Computer Programs	XL Facilitator
ST93	18.01	Calculus I	XL Facilitator
IAP96	1.992	Introduction to C++	Lectures, in charge
ST94	1.12	Computer Models for Physical and Engineering Systems	Lectures, in charge
ST95	1.12	Computer Models for Physical and Engineering Systems	Lectures, in charge
FT96	S1.40	The "Big Dig" Freshman Seminar	Seminar, co-in charge

ST96	1.12	Computer Models for Physical and Engineering Systems	Lectures, in charge
FT97	1.432	Project Control	Lectures, in charge
FT97	1.120	Master of Engineering Information technology Project	Lectures, co-in charge
FT97	S1.40	The "Big Dig" Freshman Seminar	Seminar, co-in charge
IAP97	1.120	Master of Engineering Information technology Project	Lectures, co-in charge
ST97	1.12	Computer Models for Physical and Engineering Systems	Lectures, in charge
ST97	1.120	Master of Engineering Information technology Project	Lectures, co-in charge
FT98	1.432	Project Control	Lectures, in charge
FT98	1.120	Master of Engineering Information technology Project	Lectures, in charge
IAP98	1.120	Master of Engineering Information technology Project	Lectures, in charge
ST98	1.120/1.119	Master of Engineering Information technology Project	Lectures, in charge
FT99	1.432/15.967	Project Control / System and Project Management	Lectures, co-in charge
FT99	1.120/1.118	Master of Engineering Information technology Project	Lectures, in charge
IAP99	1.120/1.118	Master of Engineering Information technology Project	Lectures, in charge
ST99	1.120/1.119	Master of Engineering Information technology Project	Lectures, in charge

FT00	1.120/1.118	Master of Engineering Information technology Project	Lectures, in charge
IAP 00	1.120	Master of Engineering Information technology Project	Lectures, in charge
ST00	1.120/1.119	Master of Engineering Information technology Project	Lectures, in charge
ST01	1.118	Distributed Development of Collaborative Engineering Support Systems	Lectures, in charge
FT01	1.118	Distributed Development of Engineering Information Systems	Lectures, in charge
ST02	1.40/1.401	Project Management	Lectures, in charge
ST03	1.40/1.401	Project Management	Lectures, in charge
ST03	CEE 498-CCR	Construction Conflict Resolution and Collaboration	Lectures, in charge
FT03	CEE 216	Construction Eng. & Mgmt	Lectures, in charge
ST04	CEE 216	Construction Eng. & Mgmt	Lectures, in charge
ST04	CEE 495	Construction Management	Seminar, in charge
FT04	CEE 320	Construction Eng. & Mgmt	Lectures, in charge
ST05	CEE 320	Construction Eng. & Mgmt	Lectures, in charge
ST04	CEE 595	Construction Management	Seminar, in charge
ST05	CEE 598-CCR	Construction Conflict Resolution and Collaboration	Lectures, in charge
FT05	CEE 320	Construction Eng. & Mgmt	Lectures, in charge
ST06	CEE 320	Construction Eng. & Mgmt	Lectures, in charge
ST06	CEE 595	Construction Management	Seminar, in charge
FT06	CEE 320	Construction Eng. & Mgmt	Lectures, co-in charge

| ST07 | CEE 320 | Construction Eng. & Mgmt | Lectures, co-in charge |
| ST07 | CEE 598-CCR | Construction Conflict Resolution and Collaboration | Lectures, co-in charge |

2. **Continuing Education** *(credit courses only)*

Year	Course		Delivery method*/# of Students
SU97	1.61s	Project Management for Engineers and Managers	Live-on-Site 35
SU97	1.70s	Use of Information Technology for Project Management	Live-on-Site 21
IAP98	1.61w	Project Management for Engineers and Managers	Live-on-Site 17
SU98	1.61s	Project Management for Engineers and Managers	Live-on-Site 40
SU98	1.70s	Use of Information Technology for Project Management	Live-on-Site 20
IAP99	1.61w	Project Management for Engineers and Managers	Live-on-Site 19
SU99	1.61s	Project Management for Engineers and Managers	Live-on-Site 37
FT00	1.61s	Project Management for Engineers and Managers	Live Transmitted/Video Tape 25
ST 03	MIT 505	Distributed Development of Engineering Information Systems	Video Tape/Web Transmission 15
ST 03	CEM 506	Distributed Development of Engineering Information Systems	Video Tape/Web Transmission 20

*live on site, live transmitted, video tape, other

3. Other Instructional Activities

Term	Subject Number	Title	Role
FT93	1.12	Computer Models for Physical and Engineering Systems	Subject Development

FT96	1.992	Introduction to C++	Course Development
ST96	1.432	Project Control	Course Development
ST97	1.120	Master of Engineering Information technology Project	Course Re-Development
SU97	1.120	Master of Engineering Information technology Project	Course Re-Development
SU98	15.967	System and Project Management	Course Re-Development
IAP01	1.118	Distributed Development of Collaborative Engineering Support Systems	Course Re-Development
IAP02	1.40/1.401	Project Management	Course Development
SU03	CEE 216	Construction Eng. & Mgmt	Course Development
FT 03		Khalied Hyari	Prelim
FT 03		Seok Yon Hwang	Qualifier
ST 04		Ahmed Khalafallah	Qualifier
ST 04		Khalied Hyari	Final Exam
SU 04		Ioannis Brilakis	Prelim
SU 04		Ken-Yu Lin	Prelim
FT 04		Anshu Manik	Prelim
FT 04		Amr Kandil	Prelim
ST 05		Ioannis Brilakis	Final Exam
ST 05		Ken-Yu Lin	Final Exam
ST 05		Amr Kandil	Final Exam
FT 05		Anshu Manik	Final Exam
ST 06		Ahmed Khalafallah	Prelim
FT06		Carol Menassa	Qualifier
FT06		SangWon Han	Qualifier

FT06	Yun-Yi Su	Qualifier
FT07	Sangwon Han	Prelim
FT07	Omar EL-Anwar	Qualifier
FT07	Ibrahim Odeh	Prelim
ST08	Carol Menassa	Prelim
ST08	Hisham Saeed	Qualifier
ST08	Hesham Osman	Final Exam
ST08	Ibrahim Odeh	Prelim
FT08	Omar EL-Anwar	Prelim
FT08	Sangwon Han	Final Exam
FT08	Mani Golparvar-Fard	Qualifier
FT08	Albert Chen	Qualifier

   4. Undergraduate Advising

   a. academic advising __7__ *(number of students, current year only)*

   b. student organizations *(list past five years)*

   c. design teams *(past five years)*

   d. other *(individual projects, engineering open house, etc. past five years)*

B.   Research, Creative, and Other Scholarly Activities

  1. Publications

   Note:
 A single asterisk(*) before any publication shows it has undergone stringent editorial review by peers. A double asterisk(**) before any publication indicates it was invited and carries with it prestige and recognition. An s before a publication shows work was undertaken based on work as a student. Place a w before any publication co-authored with students you supervise.

   a$_1$.   Books Authored or Co-Authored, Original Editions

 1. *w 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.

2. *w Peña-Mora, F., Soibelman, L., Anumba, C., Park, M., Samii, M., Lyneis, J., and Kalligeros, K., System and Project Management, MIT/Prentice Hall Civil and Environmental Engineering Textbook Series, To be published August 2009.

a$_2$. Books Authored or Co-Authored, Revisions

b$_1$. 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

b$_2$. Books Edited or Co-Edited, Revisions

c. Chapters in Books

1. ** Peña-Mora, F., Strumminger, 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. **w Vadhavkar, S. and Pena-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. **w 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.

d. Monographs [longer than an article, but shorter than a book]

e$_1$. Articles in Journals

1. *s PeñaMora, 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. *s PeñaMora, 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. *s PeñaMora, 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. *w PeñaMora, 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. *w PeñaMora, 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w 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. *w Pena-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. *w 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. *w 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. *w Peña-Mora, F., 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. *w Peña-Mora, Feniosky 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. *w 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. *w Peña-Mora, F., 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. *w 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. *w 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, Dec. 2003.

27. *w 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. *w 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. *w 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, 2005.

30. *w Aldunate, R., F. Peña-Mora and G. Robinson, "Collaborative Distributed Decision Making for Large Scale Disaster Relief Operations: Drawing Analogies from Robust Natural Systems," *Complexity*, Wiley, Hoboken, NJ, December 2005, Vol. 11, No. 2, pp. 28-38.

31. *w 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, January, 2006, Vol. 15, No. 1, pp. 84-97.

32. *w 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," Journal of Computing in Civil Engineering, ASCE, Reston, VA, January/February, 2006, Vol. 20, No. 1, pp. 13-27.

33. *w Lee, S., Peña-Mora, F., Park, M., *"Reliability and Stability Buffering Approach: Focusing on the Issues of Errors and Changes in Concurrent Design and Construction Projects,"* Journal of Construction Engineering and Management, ASCE, Reston, VA, May, 2006, Vol. 132, No. 5., pp. 452-464.

34. *w Lee, S., F. Peña-Mora and M. Park, "Web-enabled System Dynamics Model for Error and Change Management on Concurrent Design and Construction Projects," Journal of Computing in Civil Engineering, ASCE, Reston, VA, July/August, 2006, Vol. 20, No. 4, pp. 290-300.

35. *w Ng, H., F. Peña-Mora and Tamaki, T., "Dynamic Conflict Management in Large-Scale Design and Construction Projects," Journal of Management in Engineering, ASCE, Reston, VA, April, 2007, Vol. 23, No. 2, pp. 52-66.

36. *w Lee, S., and Peña-Mora, F., "Understanding and Managing Iterative Error and Change Cycles in Construction," System Dynamics Review, System Dynamics Society, Albany, NY, April, 2007, Vol. 23, No. 1, pp. 35-60.

37. *w Motawa, I., Anumba, C., Lee, S., Peña-Mora, F., "An Integrated System for Change Management System in Construction" Automation in Construction, Elsevier, Oxford, UK, May, 2007, Vol. 16, No. 3, pp. 368-377.

38. *w 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, September 2008, Vol. 134, No. 9, pp. 701-710.

39. *w Kostoulas, D., Aldunate, R., Pena-Mora, F., Lakhera, S., "A Nature-Inspired Decentralized Trust Model to Reduce Information Unreliability in Complex Disaster Relief Operations," Journal of Advanced Engineering Informatics, Amsterdam, Netherlands, January 2008, Vol. 22, No. 1, pp. 45-58.

40. *w Tsai, M., Liu, L., Pena-Mora, F., 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, April 2008, Vol. 13, pp. 179-192.

41. *w 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, v 26, Issue 5, pp. 411-425, ISSN:0263-080X, 2008.

42. *w 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, v 161, Issue 4, pp183-195 ISSN 1755-0793, 2008.

43. *w Aziz Z., Peña-Mora F., Chen A. & 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. *w Peña-mora F, Vadhavkar S, 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. *w Menassa, C., Peña Mora, F., and Pearson, N., "An Option Pricing Model to Evaluate ADR Investments in AEC Projects," accepted for publication in Journal of Construction Engineering and Management, 135 (3), pp. 156-168, ASCE, Reston, VA, 2009.

46. **w Golparvar Fard, M., Peña-Mora, F., Arboleda, C. and Lee, S.H. "Visualization of Construction Progress Monitoring using 4D simulation model overlaid on Time-lapsed photographs", accepted for publication in ASCE Journal of Computing in Civil Engineering, Special Edition on Graphical 3D Visualization in Architecture, Engineering, and Construction, Reston, VA, 2009.

47. *w Menassa, C. and Peña Mora, F. "Analysis of Dispute Review Board Applications in US Construction Projects From 1975-2007.", accepted for publication in Journal of Management of Engineering, American Society of Civil Engineers, 2009.

48. *w 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.

49. *w Aziz Z., Anumba, C. 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

50. 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. (2009), "A Mobile Ad-Hoc Network Enabled Collaborative Framework Supporting Civil Engineering Emergency Response Operations," ASCE Journal of Computing in Civil Engineering, Reston, VA, 2008

51. Aziz, Z., Anumba, C.J., and Peña-Mora, F. "Using Context-Aware Wireless Technologies To Support Teaching And Learning In Built Environment", ASC International Journal of Construction Education and Research, ISSN: 1557-8771. (Paper accepted; to appear in Volume 6 Number 1)

52. *w Menassa, C., Peña Mora, F., and Pearson, N. (2009), "A Study of Real Options with Exogenous Competitive Entry to Analyze Dispute Resolution Ladder Investments in Architechture, Engineering and Construction Projects," accepted for publication in Journal of Construction Engineering and Management, ASCE, Reston, VA, 2009.

53. *w Menassa, C., and Peña Mora, F. (2009), "A Hybrid Model Incorporating Real Options and System Dynamics Model to Assess Value of Investments in Alternative Dispute Resolutions," accepted for publication in Journal of Computing in Civil Engineering, ASCE, Reston, VA, 2009.

54. Aziz, Z., Anumba, C.J., and Peña-Mora, F. (2010) "Using Context-Aware Wireless Technologies To Support Teaching And Learning In Built Environment", International Journal of Construction Education and Research, Volume 6, Issue 1 January 2010 , pages 18 - 29 , ISSN: 1557-8771. [Online] http://www.informaworld.com/smpp/content~content=a919591171&db=all

e₁ₐ. Other Publications in Journals

1. s PeñaMora, 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.

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f.   Publications in above categories that have been submitted for publication but not yet accepted.

1. *w Menassa, C., Peña Mora, F., and Pearson, N. "A Study of Real Options with Exogenous Competitive Entry to Analyze ADR Investments in AEC Projects." Submitted to the Journal of Construction Engineering and Management, American Society of Civil Engineers, 2008, In Review.

2. *w Menassa, C. and Peña Mora, F., "A Hybrid Model Incorporating Real Options and System Dynamics Model to Assess Value of Investments in Alternative Dispute Resolutions." Submitted to the Journal of Computing in Civil Engineering, American Society of Civil Engineers, In Review.

3. ** Culligan, P and Peña-Mora, F., "Interdisciplinarity in Engineering" in the Oxford Handbook on Interdisciplinarity (HOI), Oxford University Press, Oxford, UK, Edited by James Holbrook and Robert Frodeman, In Review.

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5. *w Hajibabai, L., Peña-Mora, F., and Aziz, Z. (2009) "Visualizing Greenhouse Gas Emissions from Construction Activities Using Geo-Spatial Information Systems", Computer aided Civil and Infrastructure Engineering (Submission Date – 9th September, 2009)

6. *w Saumil, M., Peña-Mora, F., Aziz, Z., Chen, A. and Foltz, S, "Building Information Systems for Urban Emergency Response: A Scenario-based approach", Journal of Advanced Engineering Informatics (Submission Date – 2nd September, 2009)

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1. w Peña-Mora, F., Aziz, Z., Vadhavkar, S., and Sen, S., "Team Interaction Space Effectiveness For Globally Dispersed Teams: Theory And Case Studies" ASCE Journal Of Management In Engineering, Issn: 0742-597x to be submitted April 2009.

2. w Golparvar-Fard, M., Bohn, J., Teizer, J. and Peña-Mora, F. "Evaluation of Still Photography and Laser Scanning as Emerging Automated Performance Monitoring Techniques", Journal of Automation in Construction, to be submitted April 2009.

3. w Mathur, S., Poole, M., S., Peña-Mora., F., Contractor, N., Dobosh, M., Jimeno-Ingrum, D., Wang, A., and Thomas, J., "An IT based Framework to Study Large Group Interactions and Dynamics" Natural Hazards Review, American Society of Civil Engineers, to be submitted May 2009.

4. w Golparvar-Fard, M. Erdogan, B., Peña-Mora, F., and Amunba, C., "Collaboration in Globally Dispersed Teams" Automation in Construction, Elsevier, Oxford, UK to be submitted in May 2009.

5. w Han, S., Lee, S., and Peña-Mora, F., "Identification and Quantification of Non-Value Adding Activities due to Errors and Changes in Design and Construction Projects," Journal of Construction Engineering and Management, American Society of Civil Engineers, Reston, VA, to be submitted June 2009.

6. w Lee, S., Han, S., Peña-Mora, F., "Hybrid System Dynamics and Discrete Event Simulation Approach for Large-scale Construction Management." Journal of Computing in Civil Engineering, American Society of Civil Engineers, to be submitted June 2009.

7. w Lee, S., Peña-Mora, F., "Theoretical Foundation for Dynamic Project Management." Journal of Management in Engineering, American Society of Civil Engineers, to be submitted July 2009.

8. w Han, S., Lee, S., and Peña-Mora, F., "A Proactive Approach for Minimizing Negative Impact of Non-Value Adding Activities using Value Supporting Activities," Journal of Construction Engineering and Management, American Society of Civil Engineers, to be submitted July 2009.

9. w Han, S., Golparvar Fard, M., Lee, S., and Peña-Mora, F., "Representation of Negative Impact of Non-Value Adding Activities on Project Performance using a color scheme," Journal of Architectural Engineering, American Society of Civil Engineers, Reston, VA, to be submitted August 2009.

10. w Han, S. and Peña-Mora, F., "Model-based Approach for Managing Non-Value Adding Activities in Design and Construction Projects," System Dynamics Review, System Dynamics Society, Albany, NY, to be submitted August 2009.

Invited Lecturers

February 1993, "Design Rationale for Computer Supported Collaborative Engineering," Department of Computer Science, Worcester Polytechnic Institute, Worcester, MA.

October 1994, Plenary Presenter, "SHARED-DRIMS", Thirteenth Annual Conference of Ford Foundation Fellows, Washington, DC.

October 1994, "Da Vinci Agent Society Initiative," Electric Boat Corporation, Connecticut.

April 1995, "Design Rationale for Computer Supported Conflict Mitigation," Society for Advancement of Chicanos and Native Americans in Science (SACNAS) Fourth Annual Northeastern U.S. Chapter Meeting, Cornell University, Ithaca, NY.

July 1995, "Da Vinci Agent Society Initiative," Intergraph Corporation, Alabama.

July 1995, "Computer Models for Engineering Systems," Centro de Innovación Tecnológica, Departamento de Informática, Universidad Nacional de Cuyo, Mendoza, Argentina.

July 1995, "Role of Information Technology in the Future of the Province of Mendoza," Centro de Innovacion Tecnológica, Facultad de Ciencias Económicas, Universidad Nacional de Cuyo, Mendoza, Argentina.

July 1995, "Role of Information Technology in the Future of the Province of Rio Negro," Instituto Balseiro, Bariloche, Rio Negro, Argentina.

July 1995, "Computer Supported Collaborative Engineering," Departamento de Ingeniería de Sistemas y Computación, Universidad de los Andes, Santa Fe de Bogotá, Colombia; also at the Centro de Investigaciones Tecnológicas, Mendoza, Argentina, and IMPSA, Mendoza, Argentina.

October 1995, "Design Rationale for Computer Supported Change Management," Fourteenth Annual Conference of Ford Foundation Fellows, Washington, DC.

June 1996, Keynote Speaker for the Panel 96 - XXII Conferencia Latino Americana de Informática, Bogotá, D.C., Colombia with the presentation "Artificial Intelligence in Engineering."

July 1996, "Da Vinci Agent Society Initiative," Kajima Corporation, Tokyo, Japan; also at Shimizu Corporation, Tokyo, Japan, Kawasaki Corporation, Japan, Fujitsu Corporation, Japan, and NEC Corporation, Japan.

April 1997, "Da Vinci Agent Society Initiative," Argonne National Laboratory, Illinois.

April 1997, "SCHEREC," Primavera Corporation, Bala Cynwyd, Pennsylvania.

June 1997, "Project Management Integrating Cost and Schedule," Professional Session, New England Plant Engineering and Maintenance Conference, Boston, MA.

July 1997, "Collaborative Negotiation Methodology", NSF Program Directors.

April 1998, "Collaborative Negotiation Methodology," Civil Engineering Program, George Mason University.

July 1998, "Collaborative Negotiation for Large Scale Civil Engineering Projects," International Meeting on Artificial Intelligence in Structural Engineering, Ascona, Switzerland.

February 1999, "IT-Enabled Construction Offices", Keynote Speaker at the Japanese Conference on Productivity in Construction, Tokyo, Japan.

May, 1999, "Collaborative Learning Environments", Keynote Speaker on the 1999 Distance Learning Symposium at the Universidad Católica de Chile, Santiago, Chile.

August, 1999, "Collaborative Learning Environments", School of Architecture at the University of Sydney, Sydney, Australia.

August 1999, "IT-Enabled Construction Offices", Civil Engineering Department, University of Sydney, Sydney, Australia.

July, 2000, "Interactive Collaborative Environments", Kajima Corporation, Japan.

July, 2000, "Mobile Collaboration", Osaka Gankien University, Osaka, Japan.

February 2001, "Interactive Collaborative Environments", Caterpillar Lecture, University of Iowa, Sponsored by the Departments of Civil and Environmental Engineering and the Department of Mechanical Engineering.

March 2002, "Dynamic Project Management for Civil Infrastructure Systems", NAE Frontiers of Engineering, Irvine, California.

April 2002, "C3: Collaboration, Change and Conflict," New York Transit Authority, New York City, NY.

March 2003, "Collaboration during Disasters," University of California at Berkeley, Berkeley, California, and Stanford University, Stanford, California.

November 2003, "DARE: Disaster Aware/Resistant critical infrastructurE - Collaboration Perspective," Keynote Speech at the ASCE 2003 Convention, Information Technology in Civil Engineering Conference, Nashville, TN.

January 2004, "Conflict Resolution in Large-Scale Civil Engineering Infrastructure Projects," Malaysia University of Science and Technology, Kuala Lumpur, Malaysia.

January 2004, "Interdisciplinary Research in DARE: Disaster Aware/Resistant critical infrastructurE," National Academies Convocation on Facilitating Interdisciplinary Research, Washington DC.

June 2004, "Collaborative First response to Disasters Involving Critical Physical Infrastructure: Drawing from Robust Natural Systems," University of Loughborough, England; Malaysia University of Science and Technology (MUST), Malaysia; National University of Singapore (NUS), Singapore. Hong Kong University of Science and Technology (HKUST), Hong Kong.

January 2005, "Collaborative First response to Disasters Involving Critical Physical Infrastructure: Drawing from Robust Natural Systems," University of Tokyo, Tokyo; Japan.

September 2005, "CP2R: Collaboration for Preparedness, Response and Recovery during Disaster,"

Dean's Distinguished Lecture, Rice University.

June and July 2006, "Collaborative Disasters Response Involving Critical Physical Infrastructure," University of Loughborough, England; EPFL, Lausanne, Switzerland.

December 2007 and January 2008, "D4AR: Fourth Dimensional Augmented Reality for Construction Progress Monitoring," Tsinghua University, Huazhong University of Science and Technology, Tongji University, China.

g. **Other** *(patents, bulletins and reports, magazine articles, etc.)*

   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.

Internal Memoranda and Progress Reports

   1. s Logcher, R., and Peña, 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. w 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. w 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. w 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. w 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. w 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. w 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. w 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. w 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. w 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. w 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. w 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. w 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. w Peña-Mora, F., and Wang, Wei "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. w 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. w 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. w 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. w 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. w Peña-Mora, F., and Vadahvakar, 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.

2. **Grants, contracts and gifts received for your research and teaching**

   a. **For Research**

Years (Inclusive)	Brief Title or Description	Source of Funds	Total Funding	Funding Allocated to this Professor	# of PI's & Lead PI if not this Professor
1995-96	Design Rationale for Software Reusability	Draper Laboratory	$58,000	$58,000	1
1995-97	Game, Bargaining, and Contract Theories for Collaborative Design	Province of Mendoza	$80,000	$80,000	1

Years (Inclusive)	Brief Title or Description	Source of Funds	Total Funding	Funding Allocated to this Professor	# of PI's & Lead PI if not this Professor
1995-02	Collaboration/Meeting Models for Negotiation Management on the World Wide Web	Kajima Corporation	$280,000	$280,000	1
1995-98	Change Management for Computer Supported Design/Construction	Sloan Fund	$50,000	$50,000	1
1995-00	Information Technology Support for Managing Change, Cost, and Schedule	Central Artery	$360,000	$360,000	1
1996-97	Theoretical Foundations for Computer-Supported Collaborative-Competitive and Domain-Dependent Negotiation in Large-Scale Engineering Systems	National Science Foundation	$18,000	$18,000	1
1996-99	U.S. - Mexico Cooperative Research in Collaborative Design Meeting Environments and Intelligent Agents Representatives	National Science Foundation	$120,000	$120,000	1
1997-98	Scheduling Recovery Strategies	Shimizu Corporation	$40,000	$40,000	1
1997-00	IT-Based Coordination of Multiple Construction Contracts	Tren Urbana	$226,092	$226,092	1
1998-98	Design, Monitoring, and Maintenance for Sustainable Sustainability Civil Infrastructure -	Alliance for Global Sustainability	$30,000	$30,000	1

Years (Inclusive)	Brief Title or Description	Source of Funds	Total Funding	Funding Allocated to this Professor	# of PI's & Lead PI if not this Professor
	Breaking the Infrastructure Cost Spiral				
1998-02	Robust Planning	Barrington Consulting/ TDRC Intec	$200,000	$200,000	1
1998-01	A Systematic Repository of Conflict Management Expertise for Collaborative Design	National Science Foundation	$210,000	$100,000	3, Mark Klein
1999-02	Collaborative Engineering for Rescue Mission Planning	Draper Laboratory	$186,000	$186,000	1
1999-00	Electronic Transactions for Collaborative Enterprises	Pen-Op	$50,000	$50,000	1
1999-02	Geographically Distributed Team Support	Ford Motor Co.	$212,000	$212,000	1
1999-04	Collaborative Negotiation Methodology for Large-Scale Civil Infrastructure Projects	National Science Foundation CAREER-PECASE	$516,000	$516,000	1
1999-02	Collaborative Environments for Education	Microsoft	$150,000	$150,000	1
2002-03	Global Prototype Bill of Materials Change Management	Ford Motor Company	$75,000	$75,000	1
2003-06	Dynamic Planning and Control National Science Methodology (DPM) for Large Scale Foundation Construction Project	National Science Foundation	$397,521	$260,000	4
2003-04	Automated Productivity	Motorola-	$238,000	$238,000	1

Years (Inclusive)	Brief Title or Description	Source of Funds	Total Funding	Funding Allocated to this Professor	# of PI's & Lead PI if not this Professor
	Measurements For Excavations in Large Construction Projects	MIT			
2004-09	ITR: IT-based Collaboration Framework for Preparing Against, Responding to and Recovering from Disasters Involving Critical Physical Infrastructures	National Science Foundation	$2,370,000	$1,260,000	10
2005-06	**NSF CAREER Workshop at the 2005 Construction Research Congress (CRC); April 5-6, 2005; San Diego, CA**	National Science Foundation	$44,339	$35,000	3
2005-06	**SGER: Collaborative Research: Mapping and Analyzing Emergent Multiorganizational networks in the Hurricane Katrina Response**	National Science Foundation	$71,885	$35,000	2, Nosh Contractor
2005-06	**GroupScope**	NCSA	$82,500	$15,000	5, Nosh Contractor
2007-08	**Workshop on Key Research and Education Issues in Construction Engineering and Management for the 2010**	National Science Foundation	$40,000	$40,000	

Years (Inclusive)	Brief Title or Description	Source of Funds	Total Funding	Funding Allocated to this Professor	# of PI's & Lead PI if not this Professor
2007-09	**Integrated conflict claim and dispute avoidance mitigation and resolution methodology**	National Science Foundation	$134,000	$110,000	3
2007-09	**CRI-IAD - A Pressing need for observation facilitation and computer support of group interactions for advancing**	National Science Foundation	$100,000	$80,000	4
2008-11	**Interactive Ubiquitous Visualization of Construction Progress Monitoring with D4AR (4 Dimensional Augmented Reality) Models**	National Science Foundation	$340,000	$300,000	1

b. For Instruction

Years (Inclusive)	Brief Title or Description	Source of Funds	Total Funding	Funding Allocated to this Professor	# of PI's & Lead PI if not this Professor
1996-97	Software Reusability	PEER	$25,000	$25,000	1
1996-98	Evaluation of Collaborative -Distributed Education	ECSEL	$12,000	$6,000	2
1997-98	Collaboration in Australian Construction Education	Marion and Jasper Whiting Foundation	$4,265	$4,265	1
1997-00	Cooperative Electronic Research Laboratory and	Ferry Fund	$50,000	$50,000	1

	Learning Environment				
1998-99	"Campus-Aware," "IT-Enabled," Distributed Learning for Collaboration in Large-Scale Infrastructure Projects	Cordell Hull	$38,000	$38,000	1

4.   Areas of Research

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

Information technology support for collaboration in preparedness, response, and recovery during disasters involving critical physical infrastructures

Intelligent and Integrated Sustainable Construction

4.   Graduate Thesis Research Advising

Summary

	Total	Completed	In Progress
Master of Engineering	30	30	0
Master of Science	31	31	0

Doctoral

As Supervisor	17	6	11
As Reader	16	13	3

Master of Engineering Thesis

1. Guzman, Joel, M.E., 1997, "Interactive Database of Preliminary Assessment Score Sheets for Cross-site Comparison," now in Information Technology consulting.
2. Kuo, Kai, M.E., 1997, "Web-based Database-Enabled Executive Information System for Preliminary Site Assessment under CERCLA," now in Information Technology consulting.
3. Lukasiak, Anna, M.E., 1997, "Internet-Enabled Integrated Presentation System for Site Remediation Preliminary Assessment," now with Goldman Sachs.
4. Mukhopadhyay, Samrat, M.E., 1997, "Development of Data Store Search Engine for Surface Water Pathway Criteria List," now in Information Technology consulting.
5. Benjamin, Kareem, M.E., 1998, "Control Strategies for Distributed Meeting Environments," now with Oracle Corporation.
6. Su, Christine, M.E., 1998, "Design Framework for Distributed Software Development," now in Information Technology consulting.
7. Yang, Robert, M.E., 1998, "Managing a Distributed Software Engineering Team," now in Information Technology consulting.

8. Huang, Emilie, M.E., 1998, "Collaboration Framework for Environmental Conflict Resolution," now in Environmental Engineering consulting.
9. Njendu, Charles, M.E., 1998, "Quality Assurance Framework for Distributed Collaborative Software Development," now in Information Technology consulting.
10. Chen, Emily, M.E., 1999, "Collaborative Environmental Engineering," now in Environmental Engineering consulting.
11. Fu, Luke, M.E., 1999, "Collaborative Rescue Mission Planning," now in Information Technology consulting.
12. Hor, Joon, M.E., 1999, "Casual Contact Representation in Electronic Distributed Environments," now in Information Technology consulting.
13. Kuyumcu, Caglan, M.E., 1999, "Configuration Management for Distributed Development," now in general construction in Turkey.
14. Landel, Gregoire, M.E., 1999, "IT Support for Collaborative Discourse on Environmental Clean-up," now a PhD student at Columbia University.
15. Cruz, Gregorio, M.E., 1999, "Quality Assurance in Geographically Distributed Software Development," now in Information Technology consulting.
16. Manasseh, Christian, M.E., 1999, "Project Management Support for Distributed Teams," now a PhD student at the University of California at Berkeley
17. Abbott, Erik, M.E., 2000, "Intelligent Electronic Collaboration: a Business Case," now in Information Technology consulting.
18. El-Solh, Wassim, M.E., 2000, "Collaborative Design Process," now in Information Technology consulting.
19. Gemayel, Kaissor, M.E., 2000, "Enhancing Collaboration through Application Service," now in Information Technology consulting.
20. Kamili, Meimawan, M.E., 2000, "Collaborative Graphical User Interface Design," now in Information Technology consulting.
21. Kim, Sawyoon, M.E., 2000, "Quality Assurance in a Distributed Software Development Collaboration," now in Information Technology consulting.
22. Kyauk, Steven, M.E., 2000, "Intelligent Electronic Collaboration: a Technology Case," now in Information Technology consulting.
23. Liminsky, Ivan, M.E., 2000, "Collaborative Application Servers," now in Information Technology consulting.
24. Liu, Teresa, M.E., 2000, "Configuration Management for a Distributed and Collaborative Software Development Environment," now in Information Technology consulting.
25. Ma, Kenward, M.E., 2000, "Testing in a Collaborative Software Environment," now in Information Technology consulting.
26. Ng, Yu Lung, M.E., 2000, "Requirement Analysis for Distributed Software Development," now in Information Technology consulting.
27. Tan, Nhi, M.E., 2000, "Software Reusability in Collaborative Engineering Environments," now in Information Technology consulting.
28. Wong, Koon-Po, M.E., 2000, "Transaction Management on Collaborative Application Services," now in Information Technology consulting.
29. Mizunu, Yusuke, M.E., 2001, "Collaboration under Stressful Situations: Disaster Relief," now a Research Principal at the University of Tokyo, Japan.
30. Kuo, Pei-Jeng, M.E., 2001, "Next Generation Mobile Interactive Collaboration Environments," now in Information Technology consulting.

Master of Science thesis

1. Hussein, Karim, M.S., 1995, "Communication Facilitators for Distributed Collaborative Engineering Environment," now Vice-President at WebMD, a subsidiary of Emdeon Corporation.

2. Kennedy, James, M.S., 1997, "Computer Supported Negotiation and Dispute Resolution in the Large Scale Civil Engineering and Construction," now Vice-President at JP Morgan Fleming Asset Management.
3. Chen, Hong, M.S., 1997, "Web Based Project Management System," now in Information Technology consulting.
4. Vadhavkar, Sanjeev, M.S., 1997, "Augmenting Design Patterns with Design Rationale," now Vice-President at Merrill Lynch.
5. Chiou, Yee-Sue, M.S., 1998, "SCHEREC Project Management System," now in Information Technology consulting.
6. Dirisala, Siva Kumar, M.S., 1998, "DRIMER Software Reusability Methodology," now with Oracle Corporation.
7. Kwok, Szeyiu Gordon, M.S., 1999, "Effect of Globalization in Contract Negotiations," now with Oracle Corporation.
8. Harpoth, Nina, M.S., 1999, "Contract Negotiations," now with Turner Construction.
9. Li, Michael, M.S., 1999, "Integrated Project Control Methodology with Axiomatic Design Principles," now with Turner Construction.
10. Sosa Carlos, M.S., 1999, "Dispute Avoidance and Resolution in Large Scale Civil Engineering Systems," now President, Area-Azul Corporation in Venezuela.
11. Tamaki, Tadatsugu, M.S., 1999, "Relationship between Project Delivery Method and Contract Negotiation Methodologies," now a Project Manager in Kajima Corporation, Japan.
12. Park, Moonseo, M.S., 1999, "Cost Considerations in Robust Planning," now an Assistant Professor in Seoul National University, South Korea.
13. Li, Tong, M.S., 2000, "Web Integrated project Management System for Tren Urbano," now in Information Technology consulting.
14. Sutar, Ajit, M.S., 2000, "Theoretical Foundations of Robust Planning," now in Information Technology consulting.
15. Choudary, Kiran, M.S., 2000, "IT Enabled Construction Office," now with Oracle Corporation.
16. Tanaka, Shunkensen, M.S., 2000, M.S., 2000, "Partnering Effect in Collaborative Engineering in Construction Projects," now a Project Manager in Kajima Corporation, Japan.
17. Vedam, Padmanabha, M.S., 2000, "Interactions Protocol for Collaborative Engineering," now with Oracle Corporation.
18. Solari, Jaime, M.S., 2000, "Collaborative Application Service Provider Model in a Collaborative Environment," now in Information Technology consulting.
19. Olivier, Rodolphe, M.S., 2000, "Use of IT in Large-Scale Engineering Projects," now in general contracting in France.
20. Kuang, Chang, M.S., 2001, "Team Oriented Surveys for Collaborative Environments," now with Oracle Corporation.
21. Karapidakis, Sofoklis, M.S., 2001, "System and Project Management in a Global Environment," now in Information Technology consulting in Germany.
22. Dwivedi, Gyanesh, M.S., 2001, "Internet-Based Dynamic Planning System," now with Oracle Corporation.
23. Sen, Sugata, M.S., 2001, "Framework of Best Practices for Collaboration in Geographically Distributed Teams," now a PhD student at MIT.
24. McCone, Sean, M.S., 2002, "Construction Conflict Resolution Strategies," now in general contracting.
25. Fulenwider, Margaret, M.S., 2002, "Dynamic Planning and Control for Large-Scale Infrastructure Projects: Route 3N as a Case Study," now Senior Consultant at CRA International, formerly Charles River Associates International
26. Wei, Wang, M.S., 2002, "Mobile Environments for Geographically Distributed Teams," now in Information Technology consulting.

27. Kalligeros, Konstantinos, M.S., 2002, "Global Project Management: Planning and Learning," now a PhD student at MIT.
28. Lee, Sang Hyun, M.S., 2003, "Mobile, Interactive, Collaborative Dynamic Planning Methodology," now an Assistant Professor at University of Alberta.
29. Craig, Mathias, M.S., 2003, "Autonomous Vehicle Self-Organization in Unstable, Hostile, and Chaotic Environments," now President of BlueEnergy Corporation.
30. Majidi, Naz, M.S., 2003, "Conflict Profile for Large-Scale Infrastructure Projects," now with Goldman Sachs.
31. Mathur, Shobhit, 2008, "IT Framework to Study Large Group Interaction and Dynamics", now with Capital IQ.

Doctoral Theses, Supervisor *Ph.D. Degrees Granted* 7

1. Hussein, Karim, Ph.D., 1998, MIT, "Towards an Effective Distributed Collaborative Design Meeting Environment," now a Vice-President at WebMD, a subsidiary of Emdeon Corporation.
2. Soibelman, Lucio, Ph.D., 1998, MIT, "A Meta-Representation for Design Change Negotiation on Large Scale Engineering Systems in a Geographically Distributed Multi-Reasoning Mechanism," now an Associate Professor at Carnegie Mellon.
3. Vadhavkar, Sanjeev, Ph.D., 2001, MIT, "Conflict Mitigation in Collaborative Development," now a Vice-President at Merrill Lynch.
4. Park, Moonseo, Ph.D., 2001, MIT, "Robust Planning and Management of Large-Scale Engineering Projects," now an Associate Professor at the Seoul National University, South Korea.
5. Lee, Sang Hyun, PhD., May 2006, MIT "Dynamic Planning and Control Methodology: Understanding and Managing Errors and Changes in Concurrent Design and Construction Projects," now an Assistant Professor at the University of Alberta, Canada.
6. Han, Sangwon, Ph.D., 2008, UIUC, "Integrated Control Framework for Managing Non-value Adding Activities in Design and Construction Projects", now as Lecturer at New South Wales University, Sydney, Australia.
7. Carol Menassa, "Quantitative Framework to Evaluate Alternative Dispute Resolution Investments in Architecture Engineering and Construction Projects Using Option and Real Option Theory," now as Assistant Professor at University of Wisconsin - Madison

Doctoral Theses, Supervisor *Ph.D. Students Supervised at Present*: 9

1. Albert Chen, "Mobile Collaborative GIS for Disaster Response Operations," Expected May 2011, UIUC.
2. Mani Golparvar-Fard, "Application of D4AR (4D augmented reality) models for visualization of construction progress metrics," Expected May 2011, UIUC.
3. Seungjun Roh, "Visualization of Interior Construction Progress Monitoring," Expected May 2012, UIUC.
4. Xinyi Song, "Application of Insurance Policies in Construction Claim and Dispute Resolution", Expected May 2012, UIUC.
5. Saumil Mehta, "Building Assessment Framework for Disaster Management", Expected May 2013, UIUC.
6. SangUk Han, "Visualization of Safety Management Metrics", Expected May 2013, UIUC.
7. Changbum Ahn, "Intelligent & Integrated Sustainable Construction", Expected May 2013, UIUC.
8. Leila Hajbabai, "Intelligent & Integrated Sustainable Construction", Expected May 2013, UIUC.
9. Reza Shiftehfar, "Application of RFIDs for Construction Context-Awareness", Expected May 2012, UIUC.

Doctoral Theses, Reader *at Present: 3*

1. Licea, Guillermo, "Pattern Systems for Distributed Software Development," December 1999, Prof. Jesus Favela (Chair), CICESE, Mexico.
2. Chi, Jeffrey, "Information and Knowledge Segregation and the Impact on Product Development Projects," February 2001, Prof. John Williams (Chair), MIT
3. Sousa, Ines, "Learning Surrogate Model for Life-Cycle Cost Analysis of Integrated Product Designs," May 2002, Prof. Dave Marks (Chair), MIT
4. Viteri, Victor, "Learning Assessment for Structural Engineering Abstract Concepts," May 2003, Prof. Jerome Connor (Chair), MIT
5. Song, Kyuman, "3-Dimensional User-Centered Visual Representation of Project Scheduling System in Building Construction," May 2004, Prof. Spiro Pollalis(Chair), Harvard Graduate School of Design, Harvard University
6. Hyari, Khalied, "Multi-Objective Optimization of Nighttime Construction Lighting," May 2004, Prof. Khaled El-Rayes (Chair), UIUC
7. Burge, Janet, "Design Rationale for Software Development and Evolution," May 2005, Prof. David Brown (Chair), WPI
8. Lin, Ken-Yu, "Integrated Mechanisms for Information Mining in Large Construction Databases," May 2005, Prof. Lucio Soibelman (Chair), UIUC
9. Brilakis, Ioannis, "Integrated Graphical Information Mining of Large Construction Photographic Datasets," May 2005, Prof. Lucio Soibelman (Chair), UIUC
10. Kandil, Amr, "Multi-Objective Optimization of Resource Scheduling using Genetic Algorithms," May 2005, Prof. Khaled El-Rayes (Chair), UIUC
11. Manik, Anshu, "Effect of Different Contracting Methods in the Delivery of Large Transportation Infrastructure," May 2006, Prof. William Buttlar (Chair), UIUC
12. Khalafallah, Ahmed, " Multi-Objective Optimization of Construction Safety Plans," May 2006, Prof. Khaled El-Rayes (Chair), UIUC
13. Omar, Hesham, "A Knowledge-Enabled System For Coordinating The Design Of Co-Located Urban Infrastructure", May 2008, Prof. El-Diraby (Chair), University of Toronto.
14. Odeh, Ibrahim, " Multi-Objective Optimization of Construction Safety Plans," May 2009, Prof. Khaled El-Rayes (Chair), UIUC
15. El-Anwar, Omar, "Multi-Objective Optimization of Temporary Housing" May 2009, Prof. Khaled El-Rayes (Chair), UIUC
16. Leite, Fernanda, "Framework For Supporting The Decision-Making Process Of First Responders In Building Emergencies", May 2011, Prof. Burcu Akinci (Chair), Carnegie Mellon University.

5. Editorships of Journals or Other Learned Publications

Journal	Beginning	Ending
Editorial Board Member, Revista Ingeniería de Construcción,	September 1996	present
Editorial Board Member, IEEE Computer Society "Internet Computing" Magazine,	September 1996	September 1998
Editorial Board Member, International Journal of Computer-Integrated Design and Construction,	June 1997	December 2005

Editorial Board Member, <u>ASCE Journal of Computing in Civil Engineering</u>	October 1997	October 1998
Associate Editor, <u>ASCE Journal of Computing in Civil Engineering</u>	October 1998	September 2006
Specialty Editor, <u>ASCE Journal of Construction Engineering and Management</u>	July 2003	present
Editorial Advisory Board Member, <u>Journal of Information Technology in Construction</u>	September 2005	November 2009
Specially Editor, <u>ASCE Journal of Computing in Civil Engineering</u>	September 2007	present

6.   Post-doctoral Associates and Visiting Scientists

Sergio Ochoa, July 2003 – June 2004, Chile, Universidad de Chile
Zeeshan Aziz, October 2007 – Present, UK, Loughborough University
Sungju Ahn, October 2007- present, Korea, Seoul National University

7.   Other Scholarly Activities in the past five years

<u>Activity</u>	<u>Beginning</u>	<u>Ending</u>
Planning Committee Member, Ford Foundation Fellows Conference	June 1994	Oct. 1994
Scientific Committee Member, Int. Conf. on Information Technology in Civil and Structural Engineering Design Mar. 1995	Aug. 1996	
Scientific Committee Member, WET ICE '95, the Fifth Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises	Nov. 1995	Aug. 1996
Program Chair, IEEE WET-ICE: Infrastructure for Collaborative Enterprises,	July 1996	June 1997
Planning Committee Member, Ford Foundation Fellows Conference	June 1994	October 1994
Reviewer, ASME Journal of Mechanical Design	November 1994	November 1995
Reviewer, Microcomputer in Civil Engineering	January 1995	September 1997
Scientific Committee Member, International Conference on Information Technology in Civil and Structural Engineering Design	March 1995	August 1996

Participant, NSF Strategic Planning Workshop for Design Engineering	May 1995	May 1995
Reviewer, Kansas Defense 2000 DEPSCoR	July 1995	September 1995
Reviewer, CERA Special Issue on Multi-Agent Systems in Concurrent Engineering	July 1995	September 1995
Best Paper Award Reviewer, ASCE Journal of Computing in Civil Engineering Paper	November 1995	December 1995
Scientific Committee Member, WET ICE '95, the Fifth Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises	November 1995	August1996
Reviewer, International Conference on Information Technology in Civil and Structural Engineering Design	January 1996	May 1999
Reviewer, Communications of the ACM	January 1996	May 1999
Program Chair, IEEE WET-ICE: Infrastructure for Collaborative Enterprises	July 1996	June 1997
Scientific Committee Member, Conference on Concurrent Engineering in Construction '97	July 1996	July 1997
Co-Chair, American General Contractor Association/Boston Society of Architects (AGC/BSA) Information Technology Task Force Sub-Committee on IT Implementation	September 1996	May 1997
Reviewer, Journal of Advances in Engineering Software	January 1997	May 2000
Advisory Board Member, Artificial Intelligence in Design 1998	January 1997	June 1998
Reviewer, Conference on Concurrent Engineering in Construction '97	January 1997	July 1997
Reviewer, ASCE Journal of Computing in Civil Engineering	January 1997	present
Participant, NSF Strategic Planning Workshop for Information Technology and Organizations Program	April 1997	April 1997

Planning Committee Member, ASCE Fifth Congress on Computing in Civil Engineering	June 1997	October 1998
Reviewer, NSF Information Technology and Organizations Program	June 1997	May 1999
Reviewer, AI for Engineering Design Analysis and Manufacturing	July 1997	December 2000
Participant, NSF Civil & Mechanical Systems Workshop	September 1997	September 1997
Panel Review Member, NSF Integrative Graduate Education and Research Training in the Experimental Software Systems Program	October 1997	Oct.1997
Scientific Committee Member, Conference on Concurrent Engineering in Construction '99	October 1997	August 1999
Panel Review Member, NSF CMS Program	July 1998	July 1998
Co-Technical Chair, ASCE/ICCCBE 2000	October 1998	August 2000
Panel Review Member, NSF Minority Institution Instrumentation Grant	April 1999	April 1999
Reviewer, AI in Design 2000	May 1999	September 1999
Reviewer, ASCE/ICCCBE Conference	June 1999	November 1999
Reviewer, AI in Engineering Journal	June 1999	May 2000
Reviewer, Computer-Aided Civil and Infrastructure Engineering	June 1999	December 2000
Reviewer, International Journal of Computer-Integrated Design and Construction	September 1999	present
Participant, NSF-CMS Workshop for Engineering Educators	October 1999	October 1999
Panel Review Member, NSF CAREER on Education Practice Grant	November 1999	November 1999
Panel Review Member, NSF Minority Institution Instrumentation Grant	April 2000	April 2000
Delegation Member, NSF-Argentina and Chile Collaborative Research on Computer Science and Computer Engineering	May 2000	May 2000

Reviewer, NSF Information and Data Management Program	June 2000	June 2000
Planning Committee Member, Ford Foundation Fellows Conference	October 2000	October 2000
Grant Reviewer, UT Sydney	November 2000	November 2000
Member of a Committee to Review And Provide Recommendations for the Improvement of NSF Programs	May 2001	May 2001
Panel Review Member, NSF NEES Program	June 2002	June 2002
Panel Review Member, NSF CMS Program	May 2003	May 2003
Delegation Member, NSF-World Bank-United Nations Workshop on IT and Sustainability, Bangalore, India	January 2004	January 2004
Panel Review Member, NSF Minority Institution Instrumentation Grant	March 2004	March 2004
Workshop Chair, Proposal Preparation Workshop for NSF's Division of Civil & Mechanical Systems Infrastructure & Information Systems Program	April 2005	April 2005
Conference Chair, ASCE 2005 International Conference on Computing in Civil Engineering	July 2005	July 2005
Organizing Committee Member Chair, ASCE 2007 Construction Research Congress	May 2007	May 2007
Workshop Chair, Proposal Preparation Workshop for NSF's Division of Civil & Mechanical Systems & Information Systems Program	May 2007	May 2007
Technical Committee Chair, Construction Research Congress 2009	April 2009	April 2009
Technical Committee Chair, ASCE International Workshop on Computing in Civil Engineering,	June 2009	June 2009

Chair, NSF Workshop Construction in the XXI Century

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, 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, 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.

C. Service

    1. Professional Society

Organization	Offices Held
Sigma Xi	
New York Academy of Sciences	
American Society of Civil Engineering (ASCE)	Associate Editor, Journal of Computing in Civil Engineering 1998-2006 Specialty Editor, Journal of Construction and Engineering Management 2003-present Specialty Editor, Journal of Computing in Civil Engineering 2007- present

Society for Advancement of Chicanos
    and Native American in Sciences
    (SACNAS)	

Society for Professional Hispanic Engineers (SHPE)	
IEEE Computer Society	Editorial Board Member IEEE Computer Society "Internet Computing" Magazine 1996-1998
Association for Computing Machinery (ACM)	
American Society of Engineering Education (ASEE)	
Dominican Board of Engineers and Architects (CODIA)	

2. University

Activity	Beginning	Ending
Member -- Minority Recruitment (Inst.)	September 1991	May 1995
Evaluator -- MITES Program (Inst.)	March 1993	April 1993
Strategic Planning Committee (Dept.)	September 1993	May 1994
Freshman Advisor (Inst.)	September 1995	May 1997
CEE Computer Committee (Dept.)	September 1996	May 1997
SDM (Inst.)	September 1996	May 2000

Co-Director IESL (Lab.)	September 1996	July 2003
CEE Computer Committee (Co-Chair) (D)	September 1997	July 2003
Curriculum Development (Dept.)	September 1997	December 1999
CEE Textbook Development Committee (D)	June 1999	July 2003
CEE Graduate Education Committee (D)	Sept. 2000	July 2003
ESG PhD Admission Committee (Chair) (D)	Sept. 2000	July 2003
ESG PhD Qualifier Exam Administrator (D)	Sept. 2000	July 2003
CEE Textbook Series Editorial Board (Dept.)	April 2001	June 2003
UROP Coordinator (Dept.)	January 2002	June 2003
CEE Advisory Committee (Dept.)	March 2004	August 2005
CEE Department Head Search (College)	August 2004	January 2005
CEE Administrative Committee (Dept.)	January 2004	August 2004
CM Faculty Search (Dept.)	January 2005	August 2006
Working Group on Inclusion and Diversity Topic in the University 101 Curriculum	May 2006	January 2007
Provost Academic Advising Committee	September 2006	December 2006
Graduate College EOP Review Committee	September 2006	May 2007
Graduate College Fellowship Board	September 2006	May 2007
COD ICR Sub-Committee	September 2006	May 2007
Provost Enrollment Management Committee	September 2006	May 2007
Leadership and Launch Team for Social- Provost Office Staff - Dean of College of Law Search	August 2007	May 2008
Illinois Undergraduate Experience Committee	August 2007	May 2008
Summer Program Working Group	October 2007	May 2008
Technical System Program in ILIR	May 2006	present
CEE P&T Committee (Dept.)	August 2006	present
Co-Chair - Chancellor's Diversity Initiatives Committee	August 2006	present
Provost P&T Reform Committee	September 2006	present
University Lead - Interdisciplinary Consortium	July 2007	present
Transfer Initiative Working Group	August 2007	present
Interdisciplinary UG Degrees Working Group	August 2007	present
Accreditation Self-Study Report: Transformative Learning Environment Committee	October 2007	present
General University Policy Committee	October 2007	present
Co-Chair- Faculty ePortfolio/P&T ePortal	October 2007	present
Co-Chair – Institutional Entrepreneurship @ Illinois	October 2007	present

3. Federal and State

Activity	**Beginning**	**Ending**
Panel Member, "Minority and Women Perspective," NAS/NAE/IOM Committee on Science, Engineering, and Public Policy (COSEPUP) "Reshaping the Graduate Education of Scientists and Engineers" 1995 Study	June 1994	June 1994
Delegation Member, NSF-Argentina and Chile Collaborative Research on		

Computer Science and Computer Engineering	May 2000	May 2000
Member of a the Committee of Visitors for NSF CISE Directorate/IEA Division	May 2001	May 2001
Delegation Member, NSF-World Bank-United Nations Workshop on IT and Sustainability, Bangalore, India	January 2004	January 2004
Panel Member, "Perspectives from Leading Interdisciplinary Researchers" National Academies Convocation on Facilitating Interdisciplinary Research Washington DC.	January 2004	January 2004
Chair of a the Committee of Visitors for NSF CISE Directorate/CNS Division	March 2006	March 2006
Member, National Academies Committee on Advancing the Productivity and Competitiveness of the U.S. Construction Industry	August 2008	December 2008

Reviewer for several funding agencies including: NSF Information Technology and Organizations Program, NSF Information and Data Management Program, NSF Civil & Mechanical Systems Program, 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 on several initiatives for NSF and for 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.

4. **Other Outside Service**

Improvement Activities *(List any specific programs in which you have participated to improve teaching)*

How To Speak: A Workshop with Prof. Patrick Winston, January 1999, MIT
Annual UIUC Faculty Retreat on Active Learning, February 2006, UIUC
International Studies Program Workshop, 2006, UIUC
CIC Senior Leadership Seminar Series, 2006 - 2007, Purdue, Ohio State, Madison-Wisconsin
A Leaders Guide to Managing at the University of Illinois, 2007 – 2008, UIUC