

**THE UNIVERSITY OF TEXAS AT AUSTIN**  
**Cockrell School of Engineering**

**FULL NAME:** Carlos Henrique Siqueira Caldas **TITLE:** Associate Professor  
**DEPARTMENT:** Civil, Architectural, and Environmental Engineering  
**EID:** caldasch  
**CITIZENSHIP:** USA, Brazil

**EDUCATION:**

Universidade Federal do Ceará	Civil Engineering	B.S.	1988 – Spring
Universidade Federal Fluminense	Civil Engineering	M.S.	1990 – Fall
University of Illinois Urbana-Champaign	Civil Engineering	Ph.D.	2003 – Fall

**PROFESSIONAL REGISTRATION:**

Texas: P.E. License 109476  
 Brazil: CREA #8842-D

**CURRENT AND PREVIOUS ACADEMIC POSITIONS:**

Universidade Federal do Ceará	Lecturer	Spring 1995 – Fall 1998
The University of Texas at Austin	Research Fellow	Fall 2003 – Summer 2004
The University of Texas at Austin	Assistant Professor	Fall 2004 – Summer 2009
The University of Texas at Austin	Associate Professor	Fall 2009 – present

**OTHER PROFESSIONAL EXPERIENCE:**

Frota Caldas Engineering and Construction	Project Manager	1988 – 1998
Expert Engineering and Planning	PM/Consultant	1991 – 1993
AGC – State of Ceará Chapter	Technical Director	1995 – 1995
The British Council	Visiting Scholar	1995
Ecole Centrale de Lille, France	Visiting Professor	2009

**CONSULTING:**

Shell Project Academy	2006 – 2007
JMJ Associates	2007 – 2008
Universidade Federal Fluminense-FEC	2008 – 2010
Setal Óleo e Gás	2011
Centro de Excelência em EPC	2010 – 2011
Vale	2012
Petrobras	2008 – 2014
ArcelorMittal	2012 – 2014

**HONORS AND AWARDS:**

2014 Construction Industry Institute (CII) Researcher of the Year Award  
 2010 Best Paper Award – ASCE Journal of Computing in Civil Engineering – “Computer Vision-Based Video Interpretation Model for Automated Productivity Analysis of Construction Operations.”  
 2010 Construction Industry Institute (CII) Outstanding Instructor Award  
 2009 Construction Industry Institute (CII) Researcher of the Year Award  
 2009 CII Distinguished Professor Award  
 2008 Outstanding Early Career Researcher Award - FIATECH Celebration of Engineering & Technology Innovation (CETI)

2007 FIATECH CETI Award - Intelligent and Automated Construction Job Site Category. The Sandow Steam Electric Station Unit 5 RFID Trial. This field trial was part of the CII RT240 study.

University of Illinois at Urbana-Champaign: Fellowship – Computational Science and Engineering Program, 2001  
Phi Kappa Phi Honor Society, 2001

Universidade Federal Fluminense, Brazil: Fellowship – Conselho Nacional de Desenvolvimento Científico e Tecnológico – CNPq, 1989

#### **MEMBERSHIPS IN PROFESSIONAL AND HONORARY SOCIETIES:**

American Society of Civil Engineering – ASCE, USA – Member

#### **UNIVERSITY COMMITTEE ASSIGNMENTS:**

Departmental	<b>Member, Curriculum Committee</b>	<b>2009 – present</b>
	<b>Member, Graduate Fellowships, Financial Aid, and Recruiting Committee</b>	<b>2005 – 2012</b>
	<b>Graduate Recruiting Coordinator - CAEE CEPM Area</b>	<b>2005 – 2011</b>
	Member, Graduate Curricula and Policies Committee	2007 – 2009
	Member, CAEE Faculty Search Committee	2008 – 2009
	Member, CAEE Faculty Search Committee	2006 – 2007
	Member, CEPM Faculty Search Committee	2005 – 2006
	Member, CEPM Faculty Search Committee	2004 – 2005
	Member, Distinguished Lecture Series Committee	2004 – 2006
	Member, CE & ARE Curriculum Committee	2004 – 2005
	Member, Information Technology Committee	2003 – 2004
School	Member, Equal Opportunity in Engineering Committee	2004 – 2005

#### **PROFESSIONAL SOCIETY AND MAJOR GOVERNMENTAL COMMITTEES:**

International Association for Automation and Robotics in Construction

Board Member since 2008

American Society of Civil Engineers, Construction Research Council

Member since 2003

American Society of Civil Engineers, Technical Committee on Computing and Information Technology (TCCIT) Executive Committee (ExCOM)

Member since 2009, Secretary (2011-2013), Vice Chair (2013 – present)

American Society of Civil Engineers, TCCIT Visualization, Information Modeling and Simulation Committee (formerly Database and Information Management Committee)

Member since 2003; Secretary (2003 – 2005); Chair Elect (2005 – 2007); Past Chair (2007 – 2009)

American Society of Civil Engineers, TCCIT Data Sensing and Analysis Committee (formerly Intelligent Computing Committee)

Member since 2003

Construction Industry Institute, Breakthrough Strategy Committee

Member since 2009

Construction Industry Institute, Academic Committee

Member since 2006, Junior Chair Elect (2009 – 2011), Vice Chair (2013 – 2014), Chair (2014 – present)

Texas Department of Transportation, RMC 3 Right-of-Way, Technical Advisory Panel

Member (2006 – 2008)

Texas Department of Transportation, RMC 2 Planning and Environmental, Technical Advisory Panel

Member (2008 – 2012)

#### **PROFESSIONAL ACTIVITIES:**

##### ***Journal editor:***

*Automation in Construction*

Member of the Editorial Board (2007-2012)

*ASCE Journal of Construction Engineering and Management*

Assistant Specialty Editor (2004-2007); Specialty Editor (2007 - present)

***Proposal review panels:***

National Science Foundation

Civil and Mechanical Systems, Information Technology and Infrastructure Systems (06/2006)

National Science Foundation

Civil and Mechanical Systems, Information Technology and Infrastructure Systems (01/2009)

National Science Foundation

Civil and Mechanical Systems, Information Technology and Infrastructure Systems (05/2013)

***Manuscript reviews:***

Journals: ASCE Journal of Construction Engineering and Management, ASCE Journal of Infrastructure Systems, ASCE Journal of Management in Engineering, ASCE Journal of Computing in Civil Engineering, Automation in Construction, Journal of Advanced Engineering Informatics, and Computer-Aided Civil and Infrastructure Engineering.

Conferences: ICCCBE-X in Germany (2004), IGLC12 in Denmark (2004), CRC in San Diego, CA (2005), ICC in Cancun, Mexico (2005), ICCCBE-XI in Canada (2006), 13th IG-ICE in Switzerland (2006), IGLC14 in Chile (2006), CRC in Bahamas (2007), and ASCE IT in CE in Pittsburgh (2007), ISARC in Austin (2009), ASCE IT in CE in Austin (2009), CRC in Banff, Canada (2010), ISARC in Korea (2011), CRC in Ottawa, Canada (2011), ISARC in Netherlands (2012), ISARC in Montreal (2013).

***Conference committees:***

2013 International Symposium on Automation and Robotics in Construction, Montreal, Canada

Program Chair

2012 International Symposium on Automation and Robotics in Construction, Eindhoven, Netherlands

Scientific Editorial Committee

2011 International Symposium on Automation and Robotics in Construction, Seoul, Korea

International Programme Committee

2011 ASCE Construction Research Congress, Ottawa, Canada

Track Coordinator

2010 ASCE Construction Research Congress, Banff, Canada

Track Coordinator

2009 ASCE International Workshop on Computing in Civil Engineering, Austin, TX

Co-Organizer and Co-Chair

2009 International Symposium on Automation and Robotics in Construction, Austin, TX

Co-Organizer and Co-Chair

2009 Annual Workshop of the European Group for Intelligent Computing (EG-ICE), Berlin, Germany

Scientific Committee

2009 TIC - IV Encontro de Tecnologia de Informação e Comunicação na Construção, Rio de Janeiro, Brazil

Scientific Committee

2008 European Group for Intelligent Computing in Engineering 2008 Conference, Plymouth, UK

Scientific Committee

2008 International Symposium on Automation and Robotics in Construction, Vilnius, Lithuania

International Programme Committee

CIB W102 3rd International Conference on Information &amp; Knowledge Management, Stuttgart, Germany

Member of the Scientific Committee

2007 ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA

Member of the Technical Committee

2005 Construction Research Congress, San Diego, CA

Coordinator and Co-Chair, Information Technology Track

**COURSES TAUGHT:**

Semester Courses – The University of Texas at Austin

- Project Management and Economics
- Project Information Management Systems
- Artificial Intelligence for Construction Engineering and Project Management
- Data Mining
- Materials and Methods of Building Construction
- Front End and Contractor Planning

Short Courses:

- ArcelorMittal Capital Projects Investment Methodology, UT Center for Lifelong Engineering Education, February 2014 and March 2014, Belo Horizonte, Brazil.
- ArcelorMittal Capital Projects Investment Methodology, UT Center for Lifelong Engineering Education, July 2013, Luxembourg, Luxembourg.
- ArcelorMittal Capital Projects Investment Methodology, UT Center for Lifelong Engineering Education, March 2013 and May 2013, Chicago, IL.
- ArcelorMittal Capital Projects Investment Methodology, UT Center for Lifelong Engineering Education, August 2012, Vitoria, Brasil.
- ArcelorMittal Capital Projects Investment Methodology, UT Center for Lifelong Engineering Education, June 2012, Hamilton, Canada.
- ArcelorMittal Capital Projects Investment Methodology, UT Center for Lifelong Engineering Education, February 2012, March 2012, and May 2012, Lazaro Cardenas, Mexico.
- Front End Planning and Project Definition Rating Index, UT Center for Lifelong Engineering Education – January 2012, Houston, TX.
- Procurement in the Energy Industry, UT McCombs School of Business, Executive Education, September 2011, Austin, TX.
- International Frond End Planning, UT McCombs School of Business, Executive Education, March 2011 and April 2012, Austin, TX.
- Frond End Planning, Scope Control, and Change Management, UT McCombs School of Business, Executive Education, April 2010 and May 2011, Austin, TX.
- Introduction to the Construction Industry Institute Best Practices – How to Improve Project Performance, August 2010, October 2010, December 2010, and April 2011, Rio de Janeiro and São Paulo, Brazil.
- Construction Industry Institute Project Management Course I – Planning & Design, UT Center for Lifelong Engineering Education – October 2007, April 2008, July 2008, October 2008, June 2009, October 2009, May 2010, October 2010, May 2011, October 2011, May 2012, October 2012, May 2013, and October 2013, Austin, TX.
- Construction Industry Institute Project Management Course II – Project Construction & Startup, UT Center for Lifelong Engineering Education – October 2007, April 2008, July 2008, October 2008, June 2009, April 2010, October 2010, May 2011, October 2011, and May 2012, October 2012, May 2013, and October 2013, Austin, TX.
- PA200 Advanced Project Management, Shell Project Academy, November, 2006, Houston, TX.
- PA200 Advanced Project Management, Shell Project Academy, June, 2006, Kuala Lumpur, Malaysia.

**COMMUNITY ACTIVITIES:**

St. Thomas More Parish Families of Faith Ministry, Leader	2007 – 2009
ACE Mentor Program, Volunteer	2006
DestiNation Imagination	2004 – 2009
Mobile Loaves and Fishes	2012 – 2014
Leander ISD, Volunteer	2009 – 2014

**PUBLICATIONS:****A. Refereed Archival Journal Publications (\* designates graduate student advisee)****Published**

01. Caldas, C.H., Soibelman, L., and Han, J. (2002) "Automated Classification of Construction Project Documents." ASCE Journal of Computing in Civil Engineering, 16(4), 234-243.
02. Soibelman, L., Liu, L.Y., Kirby, J.G., East, E.W., Caldas, C.H., and Lin, K-Y. (2003) "Design Review Checking System with Corporate Lessons Learned." ASCE Journal of Construction Engineering and Management, 129(5), 475-484.
03. Caldas, C.H. and Soibelman, L. (2003) "Automating Hierarchical Document Classification for Construction Management Information Systems." Automation in Construction, 12(4), 395-406.
04. Kim, C., Haas, C.T., Caldas, C.H., and Liapi, K.A. (2004) "Erfassung räumlicher Daten, Integration und Modellierung für Echtzeit-Projektlebenszyklus Anwendungen." Thesis, Wissenschaftliche Zeitschrift der Bauhaus-Universität Weimar - Germany, 1. Heft 2004 50. Jahrgang, 30-37.
05. Caldas, C.H., Soibelman, L., and Gasser, L. (2005) "Methodology for the Integration of Project Documents in Model-Based Information Systems." ASCE Journal of Computing in Civil Engineering, 19(1), 25-33.
06. \*Teizer, J., Kim, C., Haas, C.T., Liapi, K.A., and Caldas, C.H. (2005) "Framework for Real-Time Three-Dimensional Modeling on Infrastructure." Transportation Research Record, Journal of the Transportation Research Board, No. 1913, 177-186.
07. Song, J., Haas, C.T., Caldas, C.H., Ergen, E., and Akinci, B. (2006) "Automating the Task of Tracking the Delivery and Receipt of Fabricated Pipe Spools in Industrial Projects," Automation in Construction, 15(2), 166-177.
08. Kim, C., Haas, C.T., Liapi, K.A., and Caldas, C.H. (2006) "Human-Assisted Obstacle Avoidance System Using 3D Workspace Modeling for Construction Equipment Operation." ASCE Journal of Computing in Civil Engineering, 20 (3), 177-186.
09. Costa, D.B., Formoso, C.T., Kagioglou, M., Alarcón, L.F., and Caldas, C.H. (2006) "Benchmarking Initiatives in the Construction Industry: Lessons Learned and Improvement Opportunities." ASCE Journal of Management in Engineering, 22(4), 158-167.
10. Song, J., Haas, C.T., and Caldas, C.H. (2006) "Tracking the Location of Materials on Construction Job Sites." ASCE Journal of Construction Engineering and Management, 132 (9), 911-918.
11. Caldas, C.H., \*Grau Torrent, D., and Haas, C.T. (2006) "Using Global Positioning System to Improve Materials-Locating Processes on Industrial Projects." ASCE Journal of Construction Engineering and Management, 132 (7), 741-749.
12. Caron, F., Razavi, S.N., Song, J., Vanheeghe, P., Duflos, E., Caldas, C.H., and Haas, C.T. (2007) "Locating Sensor Nodes on Construction Projects." Autonomous Robots, 22(3), 255-263.
13. Song, J., Haas, C.T., and Caldas, C.H. (2007) "A Proximity-Based Method for Locating RFID Tagged Objects." Advanced Engineering Informatics, 21(4), 367-376.
14. \*Teizer, J., Caldas, C.H., and Haas, C.T. (2007) "Real-Time Three-Dimensional Occupancy Grid Modeling for the Detection and Tracking of Construction Resources." ASCE Journal of Construction Engineering and Management, 133(11), 880-888.

15. \*Chou, C-C., Caldas, C.H., and O'Connor, J.T. (2007) "Decision Support System for the Combined Transportation and Utility Construction Strategy." *Transportation Research Record, Journal of the Transportation Research Board*, No. 1994, 9-16.
16. Soibelman, L., Wu, J., Caldas, C.H., Brilakis., I, and Lin, K-Y. (2008) "Management and Analysis of Unstructured Construction Data Types." *Advanced Engineering Informatics*, 22(1), 15-27.
17. \*Hwang, B-G. Thomas, S.R., Degezelle, D., and Caldas, C.H. (2008) "Development of a Benchmarking Framework for Pharmaceutical Capital Projects." *Construction Management and Economics*, 26(2), 177-195.
18. \*Gong, J. and Caldas, C.H. (2008) "Data Processing for Real-Time Construction Site Spatial Modeling." *Automation in Construction*, 17(5), 526-535.
19. \*Chi, S., Caldas, C.H., and \*Gong, J. (2008) "A Crash Avoidance Framework for Heavy Equipment Control Systems Using 3D Imaging Sensors." *ITCon Special Issue on Sensors in Construction and Infrastructure Management*, 13, 118-133.
20. Caldas, C.H., \*Chou, C., and O'Connor, J.T. (2008) "Negotiation-Based Decision Support Model for Utility Relocations in Transportation Infrastructure Projects." *Construction Management and Economics*, 29, 10, 1079-1090.
21. \*Chi, S., Caldas, C.H., and Kim, D.Y. (2009) "A Methodology for Object Identification and Tracking in Construction based on Spatial Modeling and Image Matching Techniques." *Computer-Aided Civil and Infrastructure Engineering*, 24(3), 199-211.
22. \*Grau Torrent, D. and Caldas, C.H. (2009) "A Methodology for Automating the Identification and Localization of Construction Components on Industrial Projects." *ASCE Journal of Computing in Civil Engineering*, 23, 1, 3-13.
23. \*Hwang, B-G., Thomas, S.R., Haas, C.T., and Caldas, C.H. (2009) "Measuring the Impact of Rework on Construction Cost Performance." *ASCE Journal of Construction Engineering and Management*, 135(3), 187-198.
24. Caldas, C.H., Gibson Jr., G.E., \*Weerasooriya, R., and \*Yohe, A. M. (2009) "Identification of Effective Management Practices and Technologies for Lessons Learned Programs in the Construction Industry." *ASCE Journal of Construction Engineering and Management*, 135(6), 531-539.
25. Yun, S. and Caldas, C.H. (2009) "Analyzing Decision Variables that Influence Preliminary Feasibility Studies Using Data Mining Techniques." *Construction Management and Economics*, 27(1), 73-87.
26. \*Le, T., Caldas, C.H., Gibson, Jr., G.E., and \*Thole, M. (2009) "Assessing Scope and Managing Risk in the Highway Project Development Process" *ASCE Journal of Construction Engineering and Management*, 135(9), 900-910.
27. \*Chou, C-C., Caldas, C.H., O'Connor, J.T., Sroka, A.W., and Goldman, G.K. (2009) "Identification of Decision Drivers for the Strategy of Incorporating Utility Relocations into Highway Construction Contracts." *ASCE Journal of Construction Engineering and Management*, 135(9), 812-818.
28. \*Grau, D., Caldas, C.H., Haas, C.T, Goodrum, P.M., and \*Gong, J. (2009) "Assessing the Impact of Materials Tracking Technologies on Construction Craft Productivity." *Automation in Construction*, 18, 903-911.
29. Zhai D., Goodrum, P.M., Haas, C.T., and Caldas, C.H. (2009) "Relationship between Automation and Integration of Construction Information Systems and Labor Productivity." *ASCE Journal of Construction Engineering and Management*, 135(8), 746-753.

30. Jagars-Cohen, C.A., Menches, C.L., Jangid, Y.K., and Caldas, C.H. (2009) "Priority-Ranking Workload Reduction Strategies to Address Challenges of Transportation Construction Inspection." *Transportation Research Record, Journal of the Transportation Research Board*, 2098, 13-17.
31. \*Gong, J. and Caldas, C.H. (2010) "Computer Vision-Based Video Interpretation Model for Automated Productivity Analysis of Construction Operations." *ASCE Journal of Computing in Civil Engineering*, 24(3), 252-263.
32. \*Hwang, B-G., Thomas, S.R., and Caldas, C.H. (2010) "Performance Metric Development for Pharmaceutical Construction Projects." *International Journal of Project Management*, 28(3), 265-274.
33. Nassir, H., Haas, C.T., Young, D.A., Razavi, S.N., Caldas, C.H., and Goodrum, P. (2010) "An Implementation Model for Automated Construction Materials Tracking and Locating." *Canadian Journal of Civil Engineering*, 37(4), 588-599.
34. Shahandashti, S.M., Razavi, S.N., Soibelman, L., Berges, M., Caldas, C.H., Brilakis, I., \*Teizer, J., Vela, P. A., Haas, C.T., Garrett, J., Akinci, B., and Zhu, Z. (2011) "Data Fusion Approaches and Applications for Construction Engineering." *ASCE Journal of Construction Engineering and Management*, 137(10), 863-869.
35. \*Chi, S. and Caldas, C.H. (2011) "Automated Object Identification Using Optical Video Cameras on Construction Sites" *Computer-Aided Civil and Infrastructure Engineering*, 26, 368-380.
36. Shan, Y., Goodrum, P.M., Zhai, D., Haas, C.T., and Caldas, C.H. (2011) "The Impact of Management Practices on Mechanical Construction Productivity" *Construction Management and Economics*, 29(3), 305-316.
37. \*Gong, J., Borchering, J.D., and Caldas, C.H. (2011) "Effectiveness of Craft Time Utilization in Construction Projects." *Construction Management and Economics*, 29(7), 737-751.
38. Goodrum, P.M., Haas, C.T., Caldas, C.H., Zhai, D., Yeiser, J., and Homm, D. (2011) "Model to Predict the Impact of a Technology on Construction Productivity." *ASCE Journal of Construction Engineering and Management*, 137(9), 678-688.
39. \*Gong, J., Caldas, C.H., and Gordon, C. (2011) "Learning and Classifying Actions of Construction Workers and Equipment Using Bag-of-Video-Feature-Words and Bayesian Network Models." *Advanced Engineering Informatics*, 25(4), 771-782.
40. Young, D.A., Haas, C.T., Goodrum, P.M., and Caldas, C.H. (2011) "Improving Construction Supply Network Visibility by Using Automated Materials Locating and Tracking Technology." *ASCE Journal of Construction Engineering and Management*, 137(11), 976-984.
41. Gouett, M.C., Haas, C.T., Goodrum, P.M., and Caldas, C.H. (2011) "Activity Analysis for Direct-work Rate Improvement in Construction." *ASCE Journal of Construction Engineering and Management*, 137(12), 1117-1124.
42. Caldas, C.H., Zhang, Z., Kockelman, K., Persad, K., \*Al-Halabi, R., and Kincaid, E. (2011) "Development of Best Practices for Right-of-Way Valuations and Negotiations in Transportation Projects." *Journal of the Transportation Research Forum*, 50(3), 23-41.
43. \*Gong, J. and Caldas, C.H. (2011) "An Object Recognition, Tracking, and Contextual Reasoning-based Video Interpretation Method for Rapid Productivity Analysis of Construction Operations." *Automation in Construction*, 20(8), 1211-1226.

44. Caldas, C.H., Zhang, Z., \*Al-Halabi, R., and Kincaid, E. (2012) "Electronic Appraisal Methodology for Right-of-Way Acquisition in Highway Projects." *Journal of the Transportation Research Forum*, 51(1), 19-34.
45. \*Chi, S. and Caldas, C.H. (2012) "Image-Based Safety Assessment: Automated Spatial Safety Risk Identification of Earthmoving and Surface Mining Activities." *ASCE Journal of Construction Engineering and Management*, 138(3), 341–351.
46. \*Chi, S. and Caldas, C.H. (2012) "Design of a Preliminary Error Impact Analysis Model for Spatial Safety Assessment of Earthmoving Operations." *Automation in Construction*, 22, 212-222.
47. \*Suk, S-J, \*Hwang, B-G, Dai, J., Caldas, C.H., and Mulva, S.P. (2012) "Performance Dashboard for a Pharmaceutical Project Benchmarking Program." *ASCE Journal of Construction Engineering and Management*, 138(7), 864–876.
48. \*Hwang, B-G., Thomas, S.R., and Caldas, C.H. (2012) "Application of Customized Industry-Specific Metrics to Assessment of Capital Projects Performances." *Korean Society of Civil Engineering Journal of Engineering*, 16(1), 19-27.
49. \*Chanmeka, A., Thomas, S.R., Caldas, C.H., and Mulva, S. (2012) "Assessing Key Factors Impacting the Performance and Productivity of Oil and Gas Projects in Alberta." *Canadian Journal of Civil Engineering*, 39(3), 259-270.
50. Zhang, D., Haas, C.T., Goodrum, P.M., Caldas, C.H., and Granger, R. (2012) "Construction Small-Projects Rework Reduction for Capital Facilities." *ASCE Journal of Construction Engineering and Management*, 138(12), 1377-1385.
51. Choe, S., Leite, F., Seedah, D., and Caldas, C.H. (2014) "Evaluation of Sensing Technology for the Prevention of Back-over Accidents in Construction Work Zones." *ITCon Journal*, 19, 1-19.
52. Liu, J., Shani, A., Haas, C.T., Goodrum, P., and Caldas, C.H. (2014) "Validation Methodologies and their Impact in Construction Productivity Research." *ASCE Journal of Construction Engineering and Management*, 10.1061/(ASCE)CO.1943-7862.0000882 , 04014046.

#### Accepted for Publication

01. Caldas, C.H., Menches, C., Reyes, P., \*Navarro, L., and \*Vargas, D. "Materials Management Practices in the Construction Industry." *ASCE Practice Periodical on Structural Design and Construction*, accepted on 06/16/14, tentative publication date of December 2014.
02. Caldas, C.H., \*Elkington, R., O'Connor, J.T, and \*Kim, J.Y. "Development of Method to Retain Experiential Knowledge in Capital Projects Organizations." *ASCE Journal of Management in Engineering*, accepted on 06/20/14, tentative publication date of December 2014.
03. Caldas, C.H., \*Kim, J.Y., Haas, C.T., Goodrum, P.M., and Zhang, D. "A Method to Assess the Level of Implementation of Productivity Practices on Industrial Projects." *ASCE Journal of Construction Engineering and Management*, accepted on 07/01/14, tentative publication date of February 2015.

#### Submitted – In Review

01. Nassir, H., Haas, C.T., Caldas, C.H., and Goodrum, P.M. "An Integrated Productivity Practices Implementation Index for Infrastructure Projects Execution Planning." Submitted to the *ASCE Journal of Infrastructure Systems* (In Review).



02. Shan, Y., Zhai, D., Goodrum, P.M., Haas, C.T., and Caldas C.H. “A Statistical Analysis of the Effectiveness of Management Practices in Improving Construction Labor Productivity on Large Industrial Projects.” Submitted to the ASCE Journal of Management in Engineering (In Review).
03. \*Kim, J.Y., Shan, Y., Caldas, C.H., Goodrum, P.M., and Haas, C.T. “Impact of Steel Quick Connection System on Steel Erection Labor Productivity: Case Studies and Simulation Based Analyses.” Submitted to the Canadian Journal of Civil Engineering (In Review).
04. \*Chanmeka, A, Thomas, S., Caldas, C.H., and Mulva, S. “Benchmarking for Large Energy and Mineral Resources Projects”. Submitted to the Construction Management and Economics (In Review).
05. Safa, M., Reinsma, S., Haas, C.T., Goodrum, P.M., and Caldas, C.H. “A Decision Making Method for Choosing Concrete Forming Systems.” Submitted to the Canadian Journal of Civil Engineering (In Review).

#### **B. Refereed Conference Proceedings (\* designates graduate student advisee)**

01. Caldas, C. and Limmer, C. (1991) “Integrating Time and Cost Information in Project Planning and Control Systems.” Proceedings of the XI ENEGEP, Rio de Janeiro-Brazil, September 1991.
02. Soibelman, L. and Caldas, C.H. (2000) “O Uso de Extranets no Gerenciamento de Projetos: o Exemplo Norte-Americano.” Proceedings of the ENTAC-2000, 8 pgs., Salvador, Brazil, April 26-28, 2000.
03. Soibelman, L. and Caldas, C.H. (2000) “Information Logistics Approach for Construction Inter-Organizational Information Systems.” Proceedings of the CIB W78 IABSE EG-SEA-AI International Conference on Construction Information Technology (CIT 2000), 10 pgs., Reykjavik, Iceland, June 28-30, 2000.
04. Soibelman, L. and Caldas, C.H. (2000) “Information Logistics for Construction Design Team Collaboration.” Proceedings of the 8th International Conference on Computing in Civil and Building Engineering (VIII-ICCCBE), 341-348, Stanford, CA, August 14-17, 2000.
05. Soibelman, L. and Caldas, C. (2001) “Automated Classification and Integration of Text-Based Information in Construction Inter-Organizational Systems.” Proceedings of the ASCE Specialty Conference on Fully Integrated and Automated Project Processes in Civil Engineering, 246-258, Blacksburg, VA, September 26-29, 2001.
06. Caldas, C. and Soibelman, L. (2002) “Automated Classification Methods: Supporting the Implementation of Pull Techniques for Information Flow Management.” Proceedings of the 10th International Group for Lean Construction Conference, 12 pgs., Gramado, Brazil, August 6-8, 2002.
07. Caldas, C.H. and Soibelman, L. (2002) “Implementing Automated Methods for Document Classification in Construction Management Information Systems.” Proceedings of the ASCE Workshop on Information Technologies in Civil Engineering, 194-210, Washington, DC, November 3-7, 2002.
08. Caldas, C.H. and Soibelman, L. (2003) “Integration of Construction Documents in IFC Project Models.” Proceedings of the 2003 ASCE Construction Research Congress, 8 pgs., Honolulu, HI, March 19-21, 2003.
09. Kim, C., Haas, C.T., Caldas, C.H., and Liapi, K.A. (2004) “Spatial Data Acquisition, Integration, and Modeling for Real-Time Project Life-Cycle Applications.” Proceedings of the Xth International Conference on Computing in Civil and Building Engineering, 11 pgs., Weimar, Germany, June 2-4, 2004.
10. Song, J., Caldas, C.H., Ergen, E., Haas, C.T., and Akinci, B. (2004) “Field Trials of RFID Technology for Tracking Pre-Fabricated Pipe Spools.” Proceedings of the 21st International Symposium on Automation and Robotics in Construction, 6 pgs., Jeju, Korea, September 21-25, 2004.

11. Caldas, C.H., \*Torrent, D.G., and Haas, C.T. (2004) "Integration of Automated Data Collection Technologies for Real-Time Field Materials Management." Proceedings of the 21st International Symposium on Automation and Robotics in Construction, 6 pgs., Jeju, Korea, September 21-25, 2004.
12. \*Teizer, J., Liapi, K., Caldas, C.H., and Haas, C.T. (2005) "Experiments in Real-Time Spatial Data Acquisition for Obstacle Detection." Proceedings of the 2005 Construction Research Congress, 545-549, San Diego, CA, April 5-7, 2005.
13. Song, J., Haas, C.T., Caldas, C.H., and Liapi, K. (2005) "Locating Materials on Construction Site Using Proximity Techniques." Proceedings of the 2005 Construction Research Congress, 550-554, San Diego, CA, April 5-7, 2005.
14. Caldas, C.H., \*Grau Torrent, D., and Haas, C. (2005) "GPS Technology for Locating Fabricated Pipes on Industrial Projects" Proceedings of the ASCE 2005 International Conference on Computing in Civil Engineering, 8 pgs., Cancun, Mexico, July 12-15, 2005.
15. \*Teizer, J., Bosche, F., Caldas, C.H., Haas, C.T., and Liapi, K.A. (2005) "Real-Time, Three-Dimensional Object Detection and Modeling in Construction." Proceedings of the 22st International Symposium on Automation and Robotics in Construction, Ferrara, Italy, September 11-14, 2005.
16. \*Teizer, J., Kim, C., Bosche, F., Caldas, C.H., and Haas, C.T. (2005) "Real-Time 3D Modeling for Accelerated and Safer Construction Using Emerging Technology." Proceedings of 1st International Conference on Construction Engineering and Management, 539-543, Seoul, Korea, October 16-19, 2005.
17. Caldas, C.H., Haas, C.T., Liapi, K.A., and Teizer, J. (2006) "Modeling Job Sites in Real-Time to Improve Safety during Equipment Operation." Proceedings of SPIE Vol. 6174, Smart Structures and Materials 2006: Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems, 8 pgs., San Diego, CA, February 27, 2006.
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### C. Other Major Publications

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02. Proceedings of the 2009 International Workshop on Computing in Civil Engineering, 691 pgs., edited by Carlos H. Caldas and William J. O’Brien, ASCE, Reston, VA, June 24-27, 2009.

### E. Technical Reports (\* designates graduate student advisee)

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**MAJOR ORAL PRESENTATIONS:**

01. Caldas, C.H., (2004) “Panel on Electronic File Sharing.” Central Texas Infrastructure Design and Construction Symposium, April 28, 2004. (INVITED)
02. Caldas, C.H. (2004) “Spatial data acquisition, integration, and modeling for real-time project life-cycle applications.” Xth International Conference on Computing in Civil and Building Engineering, Weimar, Germany, June 4, 2004.
03. Caldas, C.H., (2004) “3D Site Modeling for Real-Time Applications.” CII Construction Project Improvement Conference, Austin, TX, September 20, 2004. (INVITED)
04. Caldas, C.H., (2004) “Integration of Automated Data Collection Technologies for Real-Time Field Materials Management.” 21st International Symposium on Automation and Robotics in Construction, Jeju, Korea, September 25, 2004.
05. Caldas, C.H. (2005) “Integration of Project Documents in Model-Based Information Systems.” University of Texas at El Paso, April 21, 2005. (INVITED)
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16. Caldas, C.H. (2006) "Combined Transportation and Utility Construction Strategy." Texas Department of Transportation Short Courses, College Station, TX, October 11, 2006. (INVITED)
17. Chuo, C. and Caldas, C.H. (2007) "Decision Support System for the Combined Transportation and Utility Construction Strategy." 86th Transportation Research Board Annual Meeting, Washington, DC, January 23, 2007.
18. Le, T. and Caldas, C.H. (2007) "Critical Risk Elements During the Advance Planning Phase of Transportation Infrastructure Projects." 2007 Construction Research Congress, Freeport, Bahamas, May 7, 2007.
19. Grau Torrent, D. and Caldas, C.H. (2007) "A Framework for Automated Localization of On-Site Construction Components." 2007 Construction Research Congress, Freeport, Bahamas, May 7, 2007.
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21. Caldas, C.H. (2007) "Processing of High Frequency Local Area Laser Scans for Construction Site Resource Management." ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July 25, 2007.
22. Caldas, C.H. (2007) "Field Experiments of an Automated Materials Identification and Localization Model." 2007 ASCE International Workshop on Computing in Civil Engineering, Pittsburgh, PA, July 27, 2007.
23. Construction Industry Institute (CII) Research Team 230 (2007) "Implementing Lessons Learned Programs." 2008 CII Annual Conference, Implementation Session, Orlando, FL, August 2, 2007. (PANELIST)
24. Caldas, C.H. (2007) "Optimizing the Identification of Right-of-Way Requirements during the Project Development Process." Texas Department of Transportation RMC Meeting, San Antonio, TX, November 6, 2007.
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26. Construction Industry Institute (CII) Research Team 240 (2008) "RT 240 Leveraging Technology to Improve Construction Productivity." 2008 CII Annual Conference, Implementation Session, Keystone, CO, August 6, 2008. (PANELIST)
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32. Construction Industry Institute (CII) Research Team 257 (2009) “RT 257 Global Procurement and Materials Management.” 2009 CII Annual Conference, Implementation Session, Reno, NV, July 29, 2009. (PANELIST)
33. Caldas, C.H. (2010) “A Computer Vision and Reasoning Based Video Interpretation System for Rapid Productivity Analysis of Construction Operations.” The International Conference on Computing in Civil and Building Engineering, Nottingham, UK, July 2, 2010.
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36. Construction Industry Institute (CII) Research Team 252 (2011). “RT 252 Construction Productivity Research Program.” 2011 CII Annual Conference, Implementation Session, Chicago, IL, July 26, 2011. (PANELIST)
37. Petrobras Productivity Case Study (2011). “Petrobras Productivity Case Study.” 2011 CII Annual Conference, Implementation Session, Chicago, IL, July 27, 2011. (PANELIST)
38. Caldas, C.H. (2011). “Construction Productivity Improvement Strategies.” National Central University, Jhongli City, Taiwan, November 14, 2011. (INVITED GUEST LECTURER)
39. Caldas, C.H. (2011). “Site Sensing and Data Analysis for Construction Performance Improvement.” National Taiwan University, Taipei, Taiwan, November 15, 2011. (INVITED GUEST LECTURER)
40. Caldas, C.H. (2011) “Sensing and Data Analysis for Construction Productivity Improvement.” 10th International Conference on Civil and Environmental Engineering, Taipei, Taiwan, November 15, 2011. (KEYNOTE SPEAKER)
41. Caldas, C.H. (2011) “Grand Challenges for Data Sensing and Analysis.” 2011 Annual Meeting of the Chinese Institute for Civil Hydraulic and Environmental Engineering (CICHE), Taipei, Taiwan, November 18, 2011. (INVITED SPEAKER AND PANELIST)
42. Caldas, C.H. (2013). “Project Definition Rating Index” 2013 Project Improvement Workshop, Sao Paulo, Brazil, June 28, 2013. (KEYNOTE SPEAKER).
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45. Caldas, C.H. (2013) “Management of the Strategy.” Ecopetrol International Project Management Program, Bogota, Colombia, October 2012, June 2013, and August 2013.
46. Caldas, C.H. (2013) “Developing Project Management Competences in the Oil & Gas Business.” Mansarovar Energy, Bogota, Colombia, September 26, 2013.
47. Caldas, C.H. and Crain, J. (2013) “Experiential Knowledge Transfer.” 2013 CURT Annual Conference, Tucson, AZ, November 12, 2013 (KEYNOTE SPEAKER).

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49. Caldas, C.H. (2014) “Management of the Strategy.” Ecopetrol International Project Management Program, Bogota, Colombia, May 15, 2014.
50. Caldas, C.H. (2014) “Productivity Improvement Practices.” 2014 Singapore Performance Improvement Workshop, Singapore, Singapore, May 19, 2014 (KEYNOTE SPEAKER).

#### **INVITED WORKSHOPS:**

NSF-CII Workshop on Placement of Manufactured Components, Gaithersburg, MD, September 26-27, 2007.

NSF-NIST Workshop on Advanced Building Infrastructure Testbeds (NABIT), Gaithersburg, MD, September 24-26, 2006

NSF/FIATECH An Interdisciplinary Charrette: Setting an Academic Research Agenda for the FIATECH Capital Projects Technology Roadmap Initiative, Houston, TX, October 13-15, 2004.

2004 ASCE Excellence in Engineering Education (ExcEEd) Teaching Workshop, Fayetteville, AR, July 11-16, 2004.

FIATECH Intelligent and Automated Construction Job Site Workshop, Houston, TX, December 6, 2003.

Economic, Financial, and Legal Aspects of Construction Center for Construction Industry Studies (CCIS), Austin, TX, September 5, 2003.

#### **MEDIA MENTIONS: (changed this listing from new to old, ok?)**

“CII Productivity Research Team Delivers Handbook of Best Practices.” (The Top 25 Newsmakers – Cover Story) Engineering News Record, January 22, 2014.

“CII Research Shows Potential for Safety, Productivity Gains.” by Scott Judy and Janice L. Tuchman Engineering News Record, August 7, 2013.

“When Does It Pay to Use Innovative Concrete Products?” by Tudor Van Hampton, Engineering News Record, July 26, 2011.

“Rethinking Wrench Time.” by Bruce Buckley, Engineering News Record (Cover Story), McGraw-Hill, June 6, 2011.

“CII Reveals Productivity Gains for Mechanical Trades.” by Scott Blair, Engineering News Record, McGraw-Hill, August 12, 2009.

“Test Projects Show Great Potential for Tracking Technology.” by Tom Sawyer, Engineering News Record, McGraw-Hill, August 27, 2008.

“Researchers are Getting Serious about Electronic Tracking Tags.” by Tom Sawyer, Engineering News Record, McGraw-Hill, December 13, 2004.

**GRANTS AND CONTRACTS:**

**Awarded:**

Career Total	\$ 8,040,103
Career Candidate Share	\$ 4,911,193
In Rank Total	\$ 3,738,769
In Rank Candidate Share	\$ 2,486,160

Investigators	Title	Agency/ Sponsor	Grant Total	Candidate Share	Grant Period	Status
Co-PI with Mulva	Integrated Approach to Management Practices and Productivity Measurement for the Singapore Chemicals Industry – Phase 1	Singapore EDB	\$156,167	\$78,083	4/1/14 – 6/30/14	Awarded
PI	Successful Delivery of Megaprojects	CII	\$185,610	\$185,610	9/1/13 – 8/31/15	Awarded
PI	Task - Planning and Controlling Utility Relocations	TxDOT Austin District	\$199,127	\$199,127	9/1/13 – 8/31/15	Awarded
PI	Task - Investigating and Analyzing Utility Adjustment Factors	TxDOT Dallas District	\$163,636	\$163,636	9/1/13 – 8/31/16	Awarded
PI	Development of an Indoor Intelligent and Automated Construction Job Site Testbed	NIST	\$970,387	\$970,387	4/1/09 – 6/30/14	Awarded
Co-PI with Mulva	Benchmarking of Healthcare Projects	CII	\$9,564	\$4,782	9/1/12 – 8/31/13	Awarded
PI with O'Connor	Transferring Experiential Knowledge from the Near-retirement Generation to the Next Generation	CII	\$209,547	\$104,774	9/1/11 – 8/31/13	Awarded
PI with Prozzi, Loftus-Otway, Clower, and Bomba	Linking Regional Planning with Project Planning in Support of NEPA	TxDOT	\$212,996	\$139,206	9/1/11 – 12/31/12	Awarded
Co-PI with Fan, Leite, and Seedah	Prevention of Backing Fatalities in Construction Work Zones	TxDOT	\$296,864	\$20,216	9/1/11 – 8/31/13	Awarded
PI	Task - Improving Utility Adjustment Procedures	TxDOT Austin District	\$90,000	\$90,000	9/1/11 – 8/31/13	Awarded
Co-PI with Mulva	Integration of Benchmarking Databases	CII	\$101,429	\$50,714	6/1/11 – 8/31/13	Awarded
PI with Bhat, Kockelman, Loftus-Otway, and Hutson	Condemnation in Transportation Projects: Causes and Solutions	TxDOT	\$145,295	\$48,432	9/1/10 – 2/28/12	Awarded
Co-PI with Prozzi, Loftus-Otway, and Zhang	Potential Value Extraction from TxDOT's Right of Way and Other Property Assets	TxDOT	\$202,000	\$67,333	9/1/10 – 2/28/12	Awarded
Co-PI with Mulva	Effects of Project Management Practices on the Performance of Capital Facility Projects	CII	\$66,417	\$33,208	9/1/10 – 8/31/12	Awarded
PI	Task - Analyzing and Improving Utility Adjustments' Schedule and Right-of-Way Acquisition Cost Performance	TxDOT Austin District	\$131,113	\$131,113	9/15/09 – 8/31/11	Awarded

<b>Co-PI with Mulva and Jablonowski</b>	<b>Development of a Benchmarking System for Upstream Oil and Gas Projects</b>	<b>FEC/UFF/Petrobras</b>	<b>\$598,617</b>	<b>\$199,539</b>	<b>11/01/08 – 08/31/10</b>	<b>Awarded</b>
<b>Co-PI with Zhang</b>	Complete Implementation of Electronic Appraisal System	TxDOT	\$208,000	\$104,000	3/31/08 – 8/31/09	Awarded
<b>PI at UT with Haas (PI at UW) and Goodrum (PI at UK)</b>	Craft Productivity Research Program	CII	\$907,833	\$302,218	9/1/07 – 12/31/13	Awarded
<b>PI with Menches and Reyes (from Baylor)</b>	Global Procurement and Materials Management	CII	\$254,962	\$88,070	9/1/07 – 8/31/09	Awarded
<b>Co-PI with Menches and O'Connor</b>	Synthesis Study of Programs Used to Reduce the Need for Inspection Personnel	TxDOT	\$113,413	\$37,804	9/1/07 – 8/31/08	Awarded
<b>PI</b>	Task - Analyzing ROW Risks, Improving the Accuracy and Completeness of ROW Schedules, and Investigating Methods to Enhance ROW Tracking	TxDOT Austin District	\$92,000	\$92,000	9/1/07 – 8/31/09	Awarded
<b>PI at UT with Haas (PI at UW) and Goodrum (PI at UK)</b>	Leveraging Technology to Improve Construction Productivity	CII	\$199,747	\$66,667	9/1/06 – 8/31/08	Awarded
<b>Co-PI with Zhang</b>	Implementation of the Electronic Appraisal System	TxDOT	\$135,000	\$67,500	9/1/06 – 8/31/07	Awarded
<b>PI</b>	Performance Test Methods for Automated Structural Steel Pick-and-Place	NIST	\$444,762	\$444,762	4/1/06 – 3/31/09	Awarded
<b>PI at UT with Gibson (PI at UA)</b>	Effective Management Practices and Technologies for Lessons Learned Programs	CII	\$125,687	\$96,545	9/1/05 – 8/31/07	Awarded
<b>PI with Zhang, Persad, and Kockelman</b>	Best Practices in ROW Valuations and Negotiations	TxDOT	\$84,943	\$33,977	9/1/05 – 8/31/06	Awarded
<b>PI with Gibson at UA (subcontract)</b>	Optimizing the Identification of Right-of-Way Requirements during the Project Development Process	TxDOT	\$208,510	\$132,256	9/1/05 – 8/31/07	Awarded
<b>Co-PI with Prozzi</b>	Tracking the Performance of HMA Mixtures in Texas	TxDOT	\$229,162	\$8,200	9/1/05 – 8/31/08	Awarded
<b>Co-PI with Kockelman and Zhang</b>	Implementation of a Right-of-Way (ROW) Acquisition Cost Estimating Planning Tool	TxDOT	\$162,000	\$54,000	3/16/05 – 8/31/06	Awarded
<b>PI</b>	Real-Time Spatial Information Acquisition and Use for Infrastructure Construction and Maintenance	NSF	\$364,682	\$364,682	9/1/04 – 8/31/07	Awarded
<b>PI</b>	Development of Obstacle Detection Algorithms for Construction Machinery using a High Frame-rate Flash LADAR Sensor	NIST	\$50,640	\$50,640	9/21/04 – 9/20/06	Awarded
<b>PI</b>	IPA – Kamel Saidi	NIST	\$98,431	\$98,431	9/1/04 – 3/31/06	Awarded
<b>Co-PI with O'Connor</b>	Effectiveness of Combined Utility Relocation/Highway Construction Projects	TxDOT	\$248,916	\$124,458	9/1/04 – 8/31/06	Awarded
<b>Co-PI with Zhang</b>	Electronic Appraisal Development Study	TxDOT	\$227,646	\$113,823	9/1/04 – 8/31/06	Awarded

<b>PI</b>	Field Systems and Construction Automation Laboratory - Special Equipment Allocation	UT-CoE	\$140,000	\$140,000	9/1/04 –	Awarded
<b>PI</b>	Research Initiation	UT-CoE	\$5,000	\$5,000	9/1/04 –	Awarded
<b>TOTAL:</b>			<b>\$ 8,040,103</b>	<b>\$ 4,911,193</b>		

**PH.D. SUPERVISIONS COMPLETED:**

<b>Name</b>	<b>Completed</b>	<b>Dissertation</b>
<b>Suk, Soon-Jung (co-adv. with Mulva)</b>	<b>Spring 2012</b>	<b>Analysis of Project Management Attributes for the Successful Delivery of Capital Facility Projects</b>
<b>Chi, Seokho</b>	<b>Spring 2010</b>	<b>Construction Work Zone Safety Monitoring Using 3D Vision Cameras</b>
<b>Gong, Jie</b>	<b>Fall 2009</b>	<b>An Object Recognition, Tracking, and Contextual Reasoning Based Video Interpretation Methodology for Rapid Productivity Analysis of Construction Operations</b>
<b>Le, Tiendung (co-adv. with Gibson)</b>	<b>Summer 2009</b>	<b>A Methodology for Assessing Scope and Managing Risks during the Project Development Process of Transportation Infrastructure Projects</b>
<b>Chanmeka, Arpamart (co-adv. with Thomas)</b>	<b>Spring 2009</b>	<b>Managing Large Energy and Mineral Resources Projects in Challenging Environments</b>
Grau Torrent, David	Summer 2008	Development of a Methodology for Automating the Identification and Localization of Engineered Components and Assessment of its Impact on Construction Craft Productivity
Chou, Chien-Cheng	Spring 2007	Decision Support Model for the Combined Transportation and Utility Construction Strategy
Teizer, Jochen (co-adv. with Haas)	Summer 2006	Real-Time Spatial Modeling to Detect and Track Resources on Construction Sites
Hwang, Bon Gang (co-adv. with Thomas)	Fall 2006	Development of a Performance Measurement System for the Delivery of Pharmaceutical Capital Facility Projects

**M.S. SUPERVISIONS COMPLETED:**

<b>Name</b>	<b>Effort</b>	<b>Completion</b>	<b>Research Topic</b>
<b>Li, Chen-Yu</b>	<b>Report</b>	<b>Fall 2013</b>	<b>Dynamic Traffic Assignment Models</b>
<b>Jagdale, Rohit</b>	<b>Report</b>	<b>Fall 2013</b>	<b>Low Income Housing Projects</b>
<b>Elkington, Richard</b>	<b>Thesis</b>	<b>Spring 2013</b>	<b>Knowledge Transfer from the Near Retirement Generation to the Next Generation</b>
<b>Sun, Jin Ho</b>	<b>Report</b>	<b>Spring 2013</b>	<b>Implementation of Best Practices</b>
<b>Stock, Tyler</b>	<b>Thesis</b>	<b>Fall 2012</b>	<b>Linking Regional Planning with Project Planning in Support of NEPA</b>
<b>Ghosalkar, Mandar</b>	<b>Report</b>	<b>Spring 2012</b>	<b>Scheduling Utility Adjustments in Transportation Projects</b>
<b>Kincaid, Elizabeth</b>	<b>Thesis</b>	<b>Fall 2011</b>	<b>Condemnation in Transportation Projects</b>
<b>Paes, Thiago (co-adv. With J. Prozzi)</b>	<b>Thesis</b>	<b>Fall 2011</b>	<b>Value Extraction Strategies in Transportation</b>
<b>Ghandi, Yashesh</b>	<b>Report</b>	<b>Spring 2011</b>	<b>Benchmarking of Oil and Gas Projects</b>
<b>Dumal, Ateeth</b>	<b>Report</b>	<b>Spring 2011</b>	<b>Impact of the Stimulus Package on Jobs</b>
<b>Benzekri, Maria</b>	<b>Thesis</b>	<b>Fall 2010</b>	<b>Practices that Improve Productivity</b>
<b>Navarro, Laure</b>	<b>Thesis</b>	<b>Spring 2009</b>	<b>Global Procurement and Materials</b>

			<b>Management</b>
<b>Malisiovas, Andreas</b>	<b>Report</b>	<b>Fall 2008</b>	<b>Productivity Measurement Techniques</b>
Escatel, Raquel	Thesis	Fall 2006	Cost Estimating Models for Right-of-Way Acquisition
Yohe, Angie (co-adv. with Gibson)	Thesis	Fall 2006	An Analysis of Lessons Learned Programs in the Construction Industry
Thole, Michael (co-adv. with Gibson)	Thesis	Fall 2006	Advance Planning in Highway Project Development Processes
Chung, Eugene	Thesis	Summer 2006	A Synthesis of Best Practices in Right-of-Way Negotiations
Moulvi, Nadeem (co-adv. with Zhang)	Thesis	Summer 2006	Development of an Electronic Appraisal System for Right-of-Way Acquisition
Do, Hyung Rok	Thesis	Spring 2006	A Preliminary Impact Analysis of Parcel Characteristics on Condemnation Rates in Right-of-Way Acquisition in Texas
Spears, Kemit	Thesis	Spring 2006	Benefits and Challenges in Using CBCM Construction Management Software for the United States Navy Seabees
Chi, Seokho	Thesis	Fall 2005	A Preliminary Study on Path Planning and Obstacle Avoidance for Construction Equipment Based on Real-Time Spatial Models
Yeh, Shan-Pin	Report	Fall 2005	Analysis of Laser Scanning Systems for Construction
Goel, Sachin (co-adv. with Siegel)	Report	Spring 2004	Automating the Procedure of Planning the Site Layout of a Construction Project
Torrent, David G. (co-adv. with Haas)	Thesis	Summer 2004	Analysis of Automated Data Collection Technologies for Field Materials Management

**PH.D. SUPERVISIONS IN PROGRESS:**

*Students that passed the Ph.D. comprehensive exam:*

<b>Name</b>	<b>Period</b>	<b>Research Topic</b>
<b>Al-Aubady, Nadia</b> (co-adv. with Mulva)	<b>2009 – present</b>	<b>Imperfect Reporting of Safety Incidents</b>
<b>Kim, Jung Yeol</b>	<b>2010 - present</b>	<b>Automated Construction Productivity Measurement</b>

*Students that passed the Ph.D. qualifying exam (Ph.D. Candidates):*

<b>Name</b>	<b>Period</b>	<b>Research Topic</b>
<b>Park, Hyeon Yong</b> (co-adv. with Mulva)	<b>2009 - present</b>	<b>Impact of Phase Overlapping on Project Performance</b>
<b>Sharma, Vivek</b> (co-adv. with Mulva)	<b>2011 - present</b>	<b>Performance Assessment of Healthcare Projects</b>

**M.S. SUPERVISIONS IN PROGRESS:**

<b>Name</b>	<b>Effort</b>	<b>Period</b>	<b>Research Topic</b>
<b>Gupta, Ashish</b>	<b>Thesis</b>	<b>2013 - present</b>	<b>Successful Delivery of Megaprojects</b>
<b>Shetty, Harsha</b>	<b>Thesis</b>	<b>2014 - present</b>	<b>Utility Adjustments</b>

**POSTDOCTORAL FELLOWS SUPERVISION:**

Name	Period	Research Area
Song, Jongchul	May 2006 – May 2007	RFID Localization

**RESEARCH ENGINEER/SCIENTIST ASSOCIATE SUPERVISION:**

Name	Period	Research Area
Saidi, Kamel	Sep 2004 – Jun 2014	Construction Metrology and Automation

**PH.D. COMMITTEES:***Completed:*

Name	Completion	Curriculum	Supervisor
Wang, Li	2014	Civil Engineering	Dr. Leite
Yun, Sungmin	2013	Civil Engineering	Dr. O'Brien
Mondragon, Fernando	2013	Civil Engineering	Dr. O'Brien
Luo, Xiaowei	2013	Civil Engineering	Dr. O'Brien
Gao, Lu	2011	Civil Engineering	Dr. Zhang
Nguyen, Thuy	2010	Civil Engineering	Dr. O'Brien
Ruiz, Natalia	2009	Civil Engineering	Dr. Waller
Kwan, TingKwei	2009	Civil Engineering	Dr. O'Brien
Azambuja, Marcelo	2009	Civil Engineering	Dr. O'Brien
Sanders, Mark	2008	Civil Engineering	Dr. Siegel
Unnikrishnan, Avinash	2008	Civil Engineering	Dr. Waller
Siddiqui, Mohsin K.	2008	Civil Engineering	Dr. O'Brien
Jarrah, Ra'ed Tahseen	2007	Civil Engineering	Dr. O'Connor
Lownes, Nicholas Earl	2007	Civil Engineering	Dr. Machemehl
Hur, Kyeon	2007	Electrical Engineering	Dr. Santoso
Gebken, Richard	2006	Civil Engineering	Dr. Gibson
Peng, Min	2006	Civil Engineering	Dr. O'Connor
Beheiry, Salwa	2005	Civil Engineering	Dr. Haas
Song, Jongchul	2005	Civil Engineering	Dr. Haas
Sylvie, Jonathan	2005	Civil Engineering	Dr. Haas/Dr. Thomas
Chou, Jui-Sheng	2005	Civil Engineering	Dr. O'Connor

*In Progress:*

Name	Period	Curriculum	Supervisor
El Imane Bouhou, Nour	2014 - present	Civil Engineering	Dr. Blackhurst
Seedah, Dan	2013 - present	Civil Engineering	Dr. Leite
Choe, Sooyoung	2012 - present	Civil Engineering	Dr. Leite

**M.S. COMMITTEES:***Completed:*

Name	Completion	Curriculum	Supervisor
Xiong, Xiaoxia	2012	Civil Engineering	Dr. Kockelman
Choe, Sooyoung	2012	Civil Engineering	Dr. Leite



Chen, Feng	2012	Civil Engineering	Dr. Borcharding
Bhatla, Ankit	2011	Civil Engineering	Dr. Leite
Cong, Fang	2011	Civil Engineering	Dr. Borcharding
Gao, Lu	2007	Civil Engineering	Dr. Zhang
Medina, Doris	2006	Civil Engineering	Dr. Zhang
Sroka, Adam	2006	Civil Engineering	Dr. O'Connor
Couri, Guilherme	2006	Civil Engineering	Dr. Longo; Universidade Federal Fluminense - Brazil.
Kim, Dae Young	2006	Civil Engineering	Dr. O'Brien
Goldman, Grant	2005	Civil Engineering	Dr. O'Connor
Mcmillan, Lauren Ashley	2005	Civil Engineering	Dr. O'Brien
Lo, Liangchung	2005	Civil Engineering	Dr. Siegel

**VITA:**

Dr. Carlos H. Caldas is an Associate Professor at The University of Texas at Austin Department of Civil, Architectural and Environmental Engineering. He has a Ph.D. in Civil Engineering from The University of Illinois at Urbana-Champaign and has more than eighteen years of experience in construction engineering and project management. In his doctoral research, he specialized in construction engineering and project management, as well as in computational science and engineering. His current research interests are in the areas of information technologies and sensors for construction engineering and project management, advanced data analysis techniques, project performance assessment, productivity improvement, knowledge management, and infrastructure systems. He teaches courses on the subjects of information systems, data mining, project management, engineering economic analysis, and building construction. He is a Board Member of the International Association for Automation and Robotics in Construction. He is currently the Chair of the Construction Industry Institute (CII) Academic Committee, the Vice Chair of the American Society of Civil Engineers (ASCE) Technical Council for Computing and Information Technology Executive Committee, and the Past Chair of the ASCE Technical Committee on Database and Information Management. He is also a member of the ASCE Construction Research Council, the ASCE Technical Committee on Data Sensing and Automation, the ASCE Technical Committee on Visualization, Simulation, and Information Modeling, and the CII Breakthrough Strategy Committee. Dr. Caldas serves as a Specialty Editor for the ASCE *Journal of Construction Engineering and Management*. Dr. Caldas received the 2014 and the 2009 CII Researcher of the Year Award, the 2010 CII Outstanding Instructor Award, the 2009 CII Distinguished Professor Award, the 2008 FIATECH Celebration of Engineering and Technology Innovation (CETI) Outstanding Early Career Researcher award, and the 2010 Best Paper Award from the ASCE Journal of Computing in Civil Engineering.