

**Daniel Castro-Lacouture, Ph.D., P.E.**  
**Professor and Chair**  
School of Building Construction (BC)  
Georgia Institute of Technology  
Atlanta, GA 30332

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**a. Professional Preparation**

|                                     |                         |       |      |
|-------------------------------------|-------------------------|-------|------|
| Universidad de Los Andes (Colombia) | Civil Engineering       | B.S.  | 1994 |
| University of Reading (UK)          | Construction Management | M.S.  | 1999 |
| Purdue University                   | Civil Engineering       | Ph.D. | 2003 |

**b. Appointments**

|  |                       |
|--|-----------------------|
| Professor, BC, Georgia Institute of Technology                                 | Mar 2015 - Present    |
| Chair, BC, Georgia Institute of Technology                                     | July 2012 - Present   |
| Interim Chair, BC, Georgia Institute of Technology                             | July 2010 - June 2011 |
| Associate Professor, BC, Georgia Institute of Technology                       | Feb 2009 - Mar 2015   |
| Assistant Professor, BC, Georgia Institute of Technology                       | Aug 2006 - Feb 2009   |
| Assistant Professor, Civil Engineering, Ohio University                        | Sep 2003 - Jul 2006   |
| Teaching Assistant, Construction Engineering and Management, Purdue University | Jan 2001 - Aug 2003   |
| Research Fellow, Construction Innovation Centre, University of Reading (UK)    | Jun 1999 - Dec 1999   |
| Project Engineer, Drummond Limited (Colombia)                                  | Feb 1995 - Aug 1998   |
| Civil Engineer, General Comptrollership (Colombia)                             | Apr 1993 - Jan 1995   |

**c. Research, Scholarship, and Creative Activities (graduate and postdoctoral students underlined)**

**Published Books, Book Chapters, and Edited Volumes**

Yates, J.K., and Castro-Lacouture, D. (2016). *Sustainability in Engineering Design and Construction*, CRC Press, Taylor & Francis Group, ISBN: 1498733913, 452 pages.

Preface of the *Proceedings of ASCE Construction Research Congress 2014: Construction in a Global Network*, Construction Institute of the American Society of Civil Engineers, Daniel Castro-Lacouture, Javier Irizarry, and Baabak Ashuri (Eds.), Atlanta, Georgia, May 19-21, 2014.

*Proceedings of the 2014 ASCE Construction Research Congress: Construction in a Global Network*, Construction Institute of the American Society of Civil Engineers, Daniel Castro-Lacouture, Javier Irizarry, and Baabak Ashuri (Eds.), Atlanta, Georgia, May 19-21, 2014, 2405 pages.

Castro-Lacouture, D. (2014). "Resource Management and Closed-Loop Systems: Advancing Sustainable Performance Metrics," in *Measurement Science for Sustainable Construction and Manufacturing*, Bilal M. Ayyub, Richard Wright, Gerald Galloway (Eds.), Reston, VA: National Institute of Standards and Technology (NIST)/American Society of Civil Engineers (ASCE).

Florez, L., and Castro-Lacouture, D. (2013). *Materials Selection in Green Construction: Quantitative and Qualitative Considerations for Designers and Construction Managers*, LAP Lambert Academic Publishing, United States. ISBN 978-3-8454-4182-5.

*Proceedings of the Fourth Pan American Conference on Construction Management and Economics (ELAGEC IV)*, Harrison Mesa and Daniel Castro-Lacouture (Eds.), Santiago, Chile, October 4-5, 2012.

## Published and Accepted Journal Articles

- Afsari, K., Eastman, C. M., and Castro-Lacouture, D. (2017). "JavaScript Object Notation (JSON) data serialization for IFC schema in web-based BIM data exchange," *Automation in Construction*, 77, 24-51.
- Ilbeigi, M., and Castro-Lacouture, D. (2017). "Effects of Price-Adjustment Clauses on Number of Bidders and Dispersion of Bid Prices in Highway Construction," *Journal of Management in Engineering*, 33(4), 04017013.
- Ilbeigi, M., Castro-Lacouture, D., and Joukar, A. (2017). "Generalized Autoregressive Conditional Heteroscedasticity Model to Quantify and Forecast Uncertainty in the Price of Asphalt Cement," *Journal of Management in Engineering*, 33(5), 04017026.
- Yarmohammadi, S., Pourabolghasem, R., and Castro-Lacouture, D. (2017). "Mining implicit 3D modeling patterns from unstructured temporal BIM log text data," *Automation in Construction*, 81, 17-24.
- Dutt, F., Quan, S. J., Woodworth, E., Castro-Lacouture, D., Stuart, B. J. and Yang, P. P.-J. (2017). "Modeling Algae Powered Neighborhood through GIS and BIM Integration." *Energy Procedia*, Vol. 105, May 2017, p. 3830-3836.
- Ospina-Alvarado, A., Castro-Lacouture, D., and Roberts, J.S. (2016). "Unified Framework for Construction Project Integration," *ASCE Journal of Construction Engineering and Management*, 10.1061/(ASCE)CO.1943-7862.0001131, 04016019.
- Juan, Y.-K., Chen, Y.-C., Perng, Y.-H., and Castro-Lacouture, D. (2016). "Optimal Decision Model for Sustainable Hospital Building Renovation—A Case Study of a Vacant School Building Converting into a Community Public Hospital." *International Journal of Environmental Research and Public Health*, 13(7):630.
- Yang, P. J., Quan, S.J., Castro-Lacouture, D., Rudolph, C., and Stuart, B. (2014). "Performance Metrics for Designing an Algae-powered Eco Urban District: A Geodesign Perspective," *Energy Procedia*, Elsevier, Vol. 61, p. 1487-1490.
- Florez, L., Castro-Lacouture, D., and Medaglia, A.L. (2013). "Sustainable Workforce Scheduling in Construction Program Management," *Journal of the Operational Research Society*, Vol. 64 No. 8, p. 1169-1181.
- Florez, L., and Castro-Lacouture, D. (2013). "Optimization Model for Sustainable Materials Selection Using Objective and Subjective Factors," *Materials and Design*, Vol. 46 No. 1, p. 310-321.
- Florez, L., Castro-Lacouture, D., and Irizarry, J. (2013). "Measuring Sustainability Perceptions of Construction Materials," *Construction Innovation: Information, Process, Management*, Vol.13 No. 2, p. 217-234.
- Florez, L., Irizarry, J., Castro-Lacouture, D., Abdollahipour, S., and Jeong, H. (2012) "Feasibility of Implementing a Computer-Assisted PCC Rehabilitation Decision Support System in Georgia and Oklahoma," *International Journal of Construction Education and Research*, Vol. 8, p. 291-300.

## Conference Presentation with Proceedings (Refereed)

- Quan, S.J., Igou, T.S., Chang, S., Dutt, F., Castro-Lacouture, D., Chen, Y., and Yang, P. P.-J. (2017). "Decentralized algal energy system design at various urban densities and scales," *Proceedings of the World Engineers Summit – Applied Energy Symposium & Forum: Low Carbon Cities & Urban Energy Joint Conference*, WES-CUE 2017, 19–21 July 2017, Singapore.
- Chang, S., Castro-Lacouture, D., Dutt, F., and Yang, P. P.-J. (2017), "Framework for evaluating and optimizing algae façades using closed-loop simulation analysis integrated with BIM," *Proceedings of the World Engineers Summit – Applied Energy Symposium & Forum: Low Carbon Cities & Urban Energy Joint Conference*, WES-CUE 2017, 19–21 July 2017, Singapore.
- Tijo-Lopez, S., and Castro-Lacouture, D. (2016). "A System Dynamics Model for the Selection of Construction Parameters in Energy Efficient Housing," *Proceedings of ELAGEC 2016*, November 15-18. p. 211-219.
- Wasmi, H.A., and Castro-Lacouture, D. (2016). "Potential Impacts of BIM-Based Cost Estimating in Conceptual Building Design: A University Building Renovation Case Study." *Proceedings of the 2016 Construction Research Congress*, ASCE, DOI: <http://dx.doi.org/10.1061/9780784479827.042>
- Tijo-Lopez, S., and Castro-Lacouture, D. (2016). "Selection of the Design and Construction Parameters for Energy Efficient Housing Using System Dynamics." *Proceedings of the 2016 Construction Research Congress*, ASCE, DOI: <http://dx.doi.org/10.1061/9780784479827.125#sthash.bUNGO6us.dpuf>

- Fandino, J.F., Castro-Lacouture, D., and Arango, D. (2015). "Incorporation of LEED Criteria into Architectural Design Process: A Strategy to Increase Construction Quality." *Proceedings of the International Congress on Rehabilitation of Structures (CONPAT 2015)*, Lisbon, Portugal, September 8-10, 2015.
- Florez, L., and Castro-Lacouture, D. (2015). "Modeling and Quantifying Crew Design Rules in Masonry Construction." *Proceedings of the 12th North American Masonry Conference*, Denver, Colorado, May 17-20, 2015.
- Luo, S., and Castro-Lacouture, D. (2015). "Holistic Modeling of Microalgae for Powering Residential Communities." *Proceedings of the Applied Energy Symposium and Summit 2015: Low-Carbon and Urban Energy Systems (CUE 2015)*, Fuzhou, China, November 15-17, 2015.
- Zhou, H., and Castro-Lacouture, D. (2015). "Integrated Ecological Assessment of Engineering Projects Based on Energy Analysis." *Proceedings of the Applied Energy Symposium and Summit 2015: Low-Carbon and Urban Energy Systems (CUE 2015)*, Fuzhou, China, November 15-17, 2015.
- Castro-Lacouture, D., Quan, S.-J., and Yang, P. P.-J. (2014). "GIS-BIM Framework for Integrating Urban Systems, Waste Stream and Algal Cultivation in Residential Construction." *Proceedings of the 31st International Symposium on Automation and Robotics in Construction*, ISARC, Sydney, Australia, July 9-11, p. 576-583.
- Florez, L., and Castro-Lacouture, D. (2014). "Decision Support System for Sustainable Labor Management in Masonry Construction," *Proceedings of the 31st International Symposium on Automation and Robotics in Construction*, ISARC, Sydney, Australia, July 9-11, p. 536-543.
- Florez, L., Castro-Lacouture, D., and Gentry, R. (2014). "Workflows in Masonry Construction: Analysis of Labor Requirements," *Proceedings of the 9th International Masonry Conference*, Guimarães, Portugal, July 7-9, 2014.
- Florez, L., and Castro-Lacouture, D. (2014). "Decision Support System for Sustainable Labor Management in Masonry Construction," *Proceedings of the ISERC 2014 Conference*, Construction Research Track, Institute of Industrial Engineers (IIE), Montreal, Canada, May 31st - June 3rd. **Best Paper Award.**
- Thomas, A., Irizarry, J., Ryherd, E. E., Castro-Lacouture, D., and Porter, R. (2014). "Aircraft Sound Transmission in Homes Categorized by Typical Construction Type," *Proceedings of the 2014 ASCE Construction Research Congress*, Atlanta, GA, USA, May 19-21, p. 1586-1595.
- Florez, L., and Castro-Lacouture, D. (2014). "Optimal Crew Design for Masonry Construction Projects Considering Contractor's Requirements and Workers' Needs," *Proceedings of the 2014 ASCE Construction Research Congress*, Atlanta, GA, USA, May 19-21, p. 1149-1158.
- Yang, P. P., Quan, S. J., Castro-Lacouture, D., Rudolph, C., and Stuart, B. (2014). GIS-based Planning Support System for Waste Stream and Algal Cultivation in Residential Construction, *Proceedings of the 2014 ASCE Construction Research Congress*, Atlanta, GA, USA, May 19-21, p. 2385-2394.
- Wang, G., Liu, S., Yang, Y., and Castro-Lacouture, D. (2013). "Key technology research of open BIM-based construction engineering management integrated information cyber-infrastructure (CEMIC)," *Proceedings of the 30th CIB W78 International Conference*, Beijing, China, October 9-12, p. 270-279.
- Florez, L. and Castro-Lacouture, D. (2013). Spanish. "Modelo de Asignación de Recursos Humanos con Objetivos Sociales Sostenibles," *Proceedings of the Fifth Pan American Conference on Construction Management and Economics (ELAGEC V)*, Cancún, México, June 19-21.
- Gheisari, M., Florez, L., Irizarry, J., and Castro-Lacouture, D. (2012). "Evaluation of Data Requirements for Computerized Constructability Analysis of Pavement Rehabilitation Projects," *Proceedings of the 2011 ASCE Construction Research Congress*, West Lafayette, Indiana, USA, May 21-23, p. 129-138.
- Florez, L., Castro-Lacouture, D., and Medaglia, A. (2012). "Maximizing Labor Stability as a Sustainability Performance Indicator in Project Scheduling," *Proceedings of the 2011 ASCE Construction Research Congress*, West Lafayette, Indiana, USA, May 21-23, p. 465-474.
- Granier, M., and Castro-Lacouture, D. (2012). "Sustainable Fuel Cells for Residential Construction: Challenges and Opportunities," *Proceedings of the 2011 ASCE Construction Research Congress*, West Lafayette, Indiana, USA, May 21-23, p. 1971-1980.

### **Other Refereed Material**

Florez, L., Gentry, T.R., and Castro-Lacouture, D. (2013). "Using Optimization to Balance Workers' and Contractor's Needs in Masonry Construction," *Poster*, Georgia Tech Research and Innovation Conference (GTRIC), Atlanta, GA.

Florez, L., and Castro-Lacouture, D. (2012). "Maximizing Labor Stability as a Sustainability Performance Indicator in Project Scheduling," *Poster*, 2012 ASCE Construction Research Congress, Purdue University, West Lafayette, IN.

Florez, L., and Castro-Lacouture, D. (2012). "Maximizing Sustainability Performance in Construction Projects by Consciously Scheduling Workforce," *Poster*, Georgia Tech Research and Innovation Conference (GTRIC), Atlanta, GA.

### **Other Publications and Creative Products**

Brew, J., Castro-Lacouture, D., Dooley, R., Eisenberg, D., Hammond, B., Holsten, R., Kerr, J., Reichard, G., Stack, K., Sullivan, J., Torres, M., and Williford, D. (2013). *Green Advantage Compendium 2013*, Version II, 242 pages.

### **Presentations**

Keynote Speaker at the *7th Latin American Conference on Construction Management and Economics (ELAGEC 2016)*, Bogota, Colombia, November 17, 2016.

Keynote Speaker at the Shanghai Construction Innovation Summit 2016, Shanghai, China, October 26, 2016.

Panelist at the Round Table Session on BIM, Fourth International Technical Symposium on the Applications of BIM Technology in Design, Construction, and Real Estate Enterprise Collaborative Work hosted by Prof. Zhang Jinyue, Beijing, China, October 27, 2016.

Keynote Speaker at the Fourth International Technical Symposium on the Applications of BIM Technology in Design, Construction, and Real Estate Enterprise Collaborative Work, Beijing, China, October 27, 2016.

Keynote Speaker at the *9th Brazilian Symposium on Construction Management and Economics/6th Latin American Conference on Construction Management and Economics (SIBRAGEC ELAGEC 2015)*, Sao Carlos, Brazil, October 9, 2015.

Keynote Speaker at the *First International Seminar on Construction Innovation and Delivery (seIN2co)*. Spanish. "Gestión de Proyectos con Lean, BIM y BEM.", Bogota, Colombia, July 8, 2015.

Keynote speaker at Book Launch. Spanish. "Gerencia de Proyectos. Aplicación a Proyectos de Construcción de Edificaciones," by Jorge García Reyes, Diego Echeverry Campos, and Harrison Mesa Hernández, Universidad de Los Andes, July 17, 2013.

Presented seminar at Universidad de Los Andes. Spanish. "BIM para Presupuesto, Programación y Control de Proyectos," Departamento de Ingeniería Civil, Universidad de Los Andes, Bogotá, Colombia, July 15-19, 2013.

Presented seminar at Universidad de Ibagué. Spanish. "Construcciones Sostenibles," Facultad de Ingeniería, Universidad de Ibagué, Ibagué, Tolima, Colombia, June 11-15, 2013.

Presented to delegation of National Cheng Kung University (NCKU) from Taiwan, "School of Building Construction at Georgia Tech," Atlanta, Georgia, October 11, 2012.

Guest Lecturer at Xiamen University, "Emerging Research and Practice in Integrated Project Delivery: Trends and Opportunities," School of Architecture and Civil Engineering, Xiamen University, Xiamen, China, July 4th, 2012.

Guest Lecturer at Tongji University, "Research Initiatives in Integrated Project Delivery," School of Economics and Management, Tongji University, Shanghai, China, July 3, 2012.

Presented seminar at Universidad de Los Andes. Spanish. "BIM para Presupuesto, Programación y Control de Proyectos," Departamento de Ingeniería Civil, Universidad de Los Andes, Bogotá, Colombia, June 17-23, 2012.

Presented seminar to GE Energy, "Advanced Construction Management Techniques," Florence, Italy, May 9-11, 2012.

Presented to delegation of Auburn University, "School of Building Construction at Georgia Tech," Atlanta, Georgia, May 30, 2012.

**Grants and Contracts**

Title of Project: Sustainable Housing through Holistic Waste Stream Management and Algal Cultivation

Agency/Company: National Science Foundation (SEP Program)

Total Dollar Amount: \$800,000

Role: PI

Collaborators: Charles Rudolph (co-PI), Perry Yang (co-PI)

Period of Contract: 9/1/2012 – 8/30/2016

Candidate's Share: ~50% (\$400K)

Title of Project: Zero Energy Housing Prototype

Agency/Company: Architecture for Humanity / San Francisco, CA

Total Dollar Amount: \$129,900

Role: Co-PI

Collaborators: Michael Gamble (PI), Godfried Augenbroe (Co-PI), Russell Gentry (Co-PI)

Period of Contract: 08/05/13 – 01/31/2016

Candidate's Share: ~5% (\$7K)

Title of Project: Solar Installation, Mounting, Production, Labor, and Equipment Balance of System (SIMPLE BoS)

Agency/Company: Department of Energy (DOE) SunShot Initiative via GTRI

Total Dollar Amount: \$41,006

Role: Senior Personnel

Collaborators: Baabak Ashuri (PI)

Period of Contract: 01/01/13 – 12/31/2013

Candidate's Share: ~20% (\$7K)

**d. Teaching**

**Courses Taught (last five years)**

| Semester, Year | Course Number | Course Title               | Number of Students |
|----------------|---------------|----------------------------|--------------------|
| Fall 2017      | CEE 4100      | Const. Eng. & Mgmt         | 66                 |
| Spring, 2017   | CEE 4100      | Const. Eng. & Mgmt         | 90                 |
| Fall, 2015     | CEE 4110      | Const. Plans & Estimates   | 42                 |
| Spring, 2014   | BC 8000       | Ph.D. Seminar              | 3                  |
| Fall, 2013     | BC 3600       | Construction Cost Mgmt     | 20                 |
| Fall, 2013     | ARCH/BC 6731  | Zero Energy Housing        | 26                 |
| Fall, 2013     | CEE 4120      | Construction Operations    | 55                 |
| Spring, 2013   | BC 8000       | Ph.D. Seminar              | 5                  |
| Spring, 2013   | BC 8803       | Sp Tp: Prod Solar Contr    | 4                  |
| Spring, 2013   | COA 8833      | Sp Tp: Zero Energy Housing | 11                 |
| Fall, 2012     | BC 3600       | Construction Cost Mgmt     | 11                 |
| Spring, 2012   | BC 4803       | Sp Tp: Preconstr Workshop  | 6                  |
| Spring, 2012   | BC 8000       | Ph.D. Seminar              | 5                  |
| Spring, 2012   | COA 8833      | Sp Tp: Zero Energy Housing | 17                 |

**Individual Student Guidance**

Silvia Tijo, "Constructability Perspective on Sustainable Housing through Holistic Waste Stream Management and Algal Cultivation," Ph.D. student, School of Building Construction, Georgia Institute of Technology, supervised since Fall 2013.

Wayne Shannon, "Public Policy Perspective on Construction of Sustainable Housing through Holistic Waste Stream Management and Algal Cultivation," Ph.D. student, School of Building Construction, Georgia Institute of Technology, supervised since Fall 2013.

Laura Florez, "Sustainable Workforce Scheduling in Construction Program Management," Ph.D. Dissertation, School of Building Construction, Georgia Institute of Technology, graduated Fall 2015.

Angelica Ospina-Alvarado, "Unified Framework for Construction Project Integration and its Association with Project Performance," Ph.D. Dissertation, School of Building Construction, Georgia Institute of Technology, graduated Spring 2011. Current position: Lecturer at Universidad de Los Andes and Chief Technical Officer at SETRI Sustentabilidad SAS (Colombia).

Brett Haynie, "Correlation between Project Management Organization Maturity and Project Delivery Selection and Use," thesis option, School of Building Construction, Georgia Institute of Technology, expected to graduate Fall 2016.

Chawin Ngoenchuklin, "Applicability of Prefabrication Technologies in the Thai Housing Market," thesis option, School of Building Construction, Georgia Institute of Technology, graduated Summer 2014. Current position: Architect at Smallwood Reynolds Stewart Stewart.

Maria Quinones, "Decision Support System for Building Construction Product Selection Using Life-Cycle Management (LCM)," M.S. Thesis, School of Building Construction, Georgia Institute of Technology, graduated Summer 2011. Current position: Project Lead, New Market Initiatives, Elevate Energy.

Geetanjali Ningappa, "Use of Lean and Building Information Modeling (BIM) in the Construction Process; Does BIM Make it Leaner?" M.S. Thesis, School of Building Construction, Georgia Institute of Technology, graduated Spring 2011. Current position: Project Coordinator at Spaceworks Architectural Interiors.

Richard Harrison, "Feasibility of Recycled Wastewater and Stormwater Feedstock for Net-Zero Houses," PURA Award, School of Building Construction, Georgia Institute of Technology, Spring 2012.

### **Service on Thesis or Dissertation Committees**

Mehdi Nourbakhsh, "Scalable Metamodels for the Structural Optimization of Design Alternatives at the Early Stage of Construction Projects," Ph.D. Dissertation, School of Building Construction, Georgia Institute of Technology, expected to graduate Spring 2016.

Kereshmeh Afsari, "Interoperability Framework for BIM Data Exchange among Cloud-based Applications," Ph.D. Dissertation Proposal, School of Architecture, Georgia Institute of Technology, Fall 2015.

Mohammad Ilbeigi, "Material Price Volatility in Transportation Projects: Analysis of Uncertainties and Risk Management Strategies," Ph.D. Dissertation Proposal, School of Building Construction, Georgia Institute of Technology, Fall 2015.

Kia Mostaan, "Public-Private Partnerships for Highway Project Delivery in the United States: Analysis of Challenges and Improvement Areas," Ph.D. Dissertation Proposal, School of Building Construction, Georgia Institute of Technology, Fall 2015.

Masoud Gheisari, "An Ambient Intelligent Environment for Accessing Building Information in Healthcare Facility Management Operations," Ph.D. Dissertation, School of Building Construction, Georgia Institute of Technology, graduated Fall 2013.

Hamed Kashani, "A Real Options Model for the Financial Valuation of Infrastructure Systems under Uncertainty," Ph.D. Dissertation, School of Building Construction, Georgia Institute of Technology, graduated Fall 2012.

### **Mentorship of Postdoctoral Fellows or Visiting Scholars**

Dr. Dayana Bastos Costa (School of Engineering, Department of Structural and Construction Engineering, Federal University of Bahia, Brazil), "Application of Lean Construction and Integrated Managerial Systems for Construction Process Monitoring," August 2014 to July 2015.

Dr. Shipeng Luo (School of Civil Engineering and Architecture, Wuhan University of Technology, Wuhan, China), "System Dynamics for Algae-based Closed-Loop Systems in Residential Construction," September 2013 to August 2014.

Dr. Jianliang Zhou (School of Mechanics and Civil Engineering, University of Mining Technology, Xuzhou, China), "Safety Standards for Algae-based Closed-Loop Systems in Residential Construction," November 2012 to November 2013.

### **New courses developed**

BC8903 Special Problems: Serve-Learn-Sustain Design-Build Studio

BC 8000, Ph.D. Seminar: Introduction to PhD-level research in Building Construction.

BC 4803/8803, Special Topics: Productivity Analysis for Solar Contractors: Fundamentals of PV systems, residential and commercial installations, and building construction methods, such as productivity analysis, cost management, lean construction, etc.

COA 8833, Special Topics: Zero Energy Housing: Design, Simulation and Feasibility: Design, analysis, operation, construction, and cost feasibility of a "zero energy" housing development.

BC 8823, Special Topics: Construction Best Practices: Status of construction research and practice, as documented by the Construction Industry Institute. Focus on the best practices defined and developed by CII over the past 25 years.

BC 8813, Special Topics: Sustainable Energy in A/E/C: Fundamental concepts of sustainable sources of energy to power buildings, technical-economical and environmental aspects of these sources, as well as their sustainability, performance, constructability, combinability, safety, and the requirements to be included in construction documents.

BC 4803, Special Topics: Estimating Workshop: Collaborative working as a project team through hands-on workshop settings simulating the preconstruction process.

### **e. Service**

#### **Professional Contributions**

Panel Moderator, "Connected living – at home and in the city." 3rd Annual Internet of Things Global Summit, Washington, D.C., October 26-27, 2015.

Member, Board of Directors, International Association for Automation and Robotics in Construction, since 2014.

Panelist, "How to get published and get your paper noticed," Faculty Engagement, Library, Georgia Institute of Technology, May 21, 2014.

Chair, 2014 ASCE Construction Research Congress (CRC2014), sponsored by the Construction Institute of the American Society of Civil Engineers (ASCE) and the School of Building Construction, Georgia Institute of Technology, Atlanta, GA, USA, May 19-21, 2014.

Chair, Prospective and Junior Faculty Panel, ASCE Construction Research Congress, Atlanta, Georgia, May 20, 2014.

Founding Member, ASCE Construction Institute, North Georgia Chapter, since April 2014.

Editorial Board Member, *Revista Ambiente Construído*, the main Brazilian journal in the field of the Built Environment. This journal is kept by ANTAC, a scientific association in this field, since December 2013.

Associate Editor, *Automation in Construction*, an international research journal published by Elsevier, and one of the two journals in the world with the highest ISI Impact Factors in the field of construction engineering and management. Associate Editor since December 2012.

**Public and Community Service**

Member, International Green Builder Certification Board, since 2011.

Member, Governing Board, Architecture/Construction/Engineering (ACE) Mentor Program of Atlanta, since 2010.

Member of Georgia Department of Education Career Clusters/Pathway Curriculum Revision Project, Architecture and Construction Foundational Courses, since 2012.

Member of the Advisory Board for the 2012 Retail Design and Construction Conference, Atlanta, Georgia, September 13-14, 2012.

Participated in Curriculum Charrette for Greenprints 2013, Southface Eco Office, Atlanta, Georgia, June 7, 2012.