

CONTACT

Name: Joseph M. Burgett
Title: Assistant Professor and Endowed CSM
Professor
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**EDUCATION**

- Ph.D. Building Construction. May 2013. University of Florida; College of Design Construction and Planning.
- Masters of Science in Building Construction. May 2011. University of Florida; M.E. Rinker Sr. School of Building Construction.
- Bachelor of Science in Building Construction. May 2002. University of Florida; M.E. Rinker Sr. School of Building Construction.

RESEARCH INTERESTS

- Construction technology
- UAS (drones) in construction and infrastructure
- Sustainability
- Construction education

CERTIFICATIONS, LICENSES AND AWARDS

- 2018 Clemson Alumni Master Teacher Award
- CSM Endowed Professor
- 2018 American Institute of Constructor Young Member Award
- 2017 ASC Region 2 National Excellence in Teaching Award
- 2016 ASC Region 2 Excellence in Teaching Award
- Remote Pilot Airman Certificate with a Small UAS Rating
- Certified General Contractor: CG C1506115
- Certified Professional Constructor: 11593
- LEED Accredited Professional
- The John D. Doran Jr. Memorial Customer Service Award. (2008)

PROFESSIONAL EXPERIENCE

- 2013 – Present:** **Clemson University** CSM Endowed Assistant Professor
- Courses taught:
 - CSM3040: Environmental Systems 1
 - CSM3050: Environmental Systems 2
 - CSM3070: Principles and Practices of Sustainable Construction
 - CSM2040: Contract Documents
 - CSM4980: Current Topics in Construction
 - CSM4900: Directed Study
 - CSM8670: Green Building Delivery
 - CSM8890: Special Problem
 - CSM8900: Directed Study
 - PDBE9900: Directed Study

- 2011 – 2014:** **National Labor College** Adjunct Instructor
- Courses taught:
 - CMGT4050: Fundamentals of the Construction Industry I.
 - CMGT4051: Fundamentals of the Construction Industry 2.
 - CMGT4100: Project Building Systems.
 - CMGT4200: Project Administration.
 - CMGT4220: Construction Project Planning and Scheduling.
 - CMGT4700: Construction Cost Accounting, Estimating and Finance.
 - Courses Developed
 - CMGT4700: Cost Accounting, Estimating and Finance

- 2003 – 2010:** **The Weitz Company**
Project Manager
- Responsible for the overall management of multiple commercial construction projects.
 - Projects ranged in size from 250K to 25 million dollars.
 - Primary responsibilities included:

- Cost management.
- Contract administration.
- Owner relations.
- Staff development.
- Project types include biomedical research, health care, retirement campuses, municipal complexes, courthouses and libraries.

2002 – 2003: **Peter R. Brown Construction** Project Engineer

- Supported project management in commercial construction projects.
- Project size ranged from 250K – 5 million dollars.
- Project types include health care, municipal complexes, and courthouses.

REFEREED JOURNAL AND BOUND PUBLICATIONS

Usher, Todd. & Burgett, Joseph. (2019) Consumer Perception and Willingness to Pay for Extended new Home Warranties: Professional Constructor; Journal of the American Institute of Constructors (Accepted)

Burgett, Joseph. & Sharp, Julia. (2018) Impact of Motivation and Preparation on AC Exam Scores. Professional Constructor; Journal of the American Institute of Constructors 1(2018) page 5 – 14.

Burgett, Joseph., Perrenoud, Anthony, & Smith, James. (2017). Identification and Prioritization of Critical Subject Matter within Mechanical Systems Curriculum in Construction Education. International Journal of Construction Education and Research. ISSN: 1557-8771

Burgett, Joseph. (2017) Measures to Motivate and Prepare Students Taking the AC Exam: A Survey of University Department Heads. Professional Constructor; Journal of the American Institute of Constructors 2(2017) page 5 – 15..

Burgett, Joseph. (2016). American Institute of Constructors' Associate Constructors Study Guide. Alexandria, VA.

Burgett, Joseph., Smith, James., & Lavang, Yamini. (2016). A Comparison between Industry's and Academia's Perceptions of a Career in Construction Education. *International Journal of Construction Education and Research*. ISSN: 1557-8771

Burgett, Joseph & Sharp, Julia. (2015). HERS Standards Plug-Load Interaction Model Exploration: Incorporating the Interaction of Independent Variables to Improve the HERS Standards Plug-Load Models. *Journal of Energy Systems*. DOI: 10.1007/s12667-016-0200-1

Burgett, Joseph. (2015). Fixing the American Energy Leak: The effectiveness of a whole-house switch for reducing standby power loss in U.S. residences. *Energy Research & Social Science* 6(2015) page 87 – 94. DOI: 10.1016/j.erss.2014.12.006.

- Paper cited in Washington Post, "Energy and Environment" on February 6th, 2015 (Article: Your home is full of devices that never turn off. And they're costing you a lot of money. By Chris Mooney).

Burgett, Joseph. & Chini, Abdol. (2015). Using Building and Occupant Characteristics to Predict Residual Miscellaneous Electrical Loads: A Comparison between an Asset Label and an Operational Model. *Journal of Building Performance Simulation* (Feb 2015). DOI: 10.1080/19401493.2014.999122

Burgett, Joseph, Chini, Abdol & Oppenheim, Paul. (2013). Specifying Residential Retrofit Packages for 30% Reductions in Energy Consumption in Hot-Humid Climate Zones. *Energy Efficiency* 6(3) page 523 - 543. DOI: 10.1007/s12053-012-9190-6

- Paper featured in Renewable Energy Global Innovations Series (ISSN 2291-2460)

Burgett, Joseph & Chini, Abdol. (2012). Effective Energy Efficiency Measures for Existing Residential Homes in the Florida Market. Published in the *International Journal of Construction Education and Research*, 9 page 61 - 80. DOI:10.1080/15578771.2012.677966.

REFEREED CONFERENCE PROCEEDING PUBLICATIONS

Adjidjonu, Denise & Burgett, Joseph. (201). Optimal UAS Parameters for Aerial Mapping and Modeling. *Proceedings of the Associated Schools of Construction Annual Proceedings*; Denver, CO.

Smith, James & Burgett, Joseph. (2019). Review of the Current State of Hiring International Engineering Students. Proceedings of the Associated Schools of Construction Annual Proceedings; Denver, CO.

Bausman, Dennis., Burgett, Joseph., Chowdhury, Mashrur., and Greider, Phillip. (2019). State Department of Transportation Unmanned Aircraft Systems Policy Development. Proceedings of the Transportation Review Board Annual Meeting; Washington DC.

Burgett, Joseph. (2018). Perception of the AC Exam by Pass or Fail Status. Proceedings of the Associated Schools of Construction Annual Proceedings; Minneapolis, MN.

Burgett, Joseph & Greene, Daniel. (2018). Quantifying the Cache: The Premium for Solar Homes is Not Explained by Reduced Energy Costs. Proceedings of the Associated Schools of Construction Annual Proceedings; Minneapolis , MN.

Smith, James & Burgett, Joseph. (2018). Work Values of Millennial Construction Management Students. Proceedings of the Associated Schools of Construction Annual Proceedings; Minneapolis , MN.

Lucas, Jason., Burgett, Joseph., Hoover, Adam., & Gungor, Mehmet. (2016). Use of Ultra-Wideband Sensor Networks to Detect Safety Violations in Real Time. Proceedings of 33rd International Symposium on Automation and Robotics in Construction (ISARC 2016); Auburn, AL.

Burgett, Joseph. (2016). Leveraging Immersion Technologies in Construction Management Education: A National Electrical Code 3D Simulation Tool. Proceedings of the Associated Schools of Construction Annual Proceedings; Provo, UT.

Burgett, Joseph. (2015). Using 3D Simulation to Improve Construction Management Education: A Pilot Study to Teach the NFPA70-National Electrical Code. Proceedings of the 15th International Conference on Construction Applications of Virtual Reality (CONVR2015); Banff, Canada.

Burgett, Joseph. (2014). Can “Flipping the Classroom” Improve the Educational Experience in Construction Management Courses: A Case Study in Teaching HVAC Psychrometrics. Proceedings of the Associated Schools of Construction Annual Proceedings; Washington, DC.

Burgett, Joseph & Chini, Abdol. (2014). Energy Modeling as Part of a Comprehensive Residential NZE Strategy. Proceedings of the iiSBE Net Zero Built Environment 2014 17th Rinker International Conference. March 6-7, Gainesville, Florida.

Burgett, Joseph & Chini, Abdol. (2013). Reducing Residential Miscellaneous Electrical Loads with a Whole-House Switch. Proceedings of the Associated Schools of Construction Annual Proceedings; San Luis Obispo, CA.

FUNDED RESEARCH

2018 – The Viability of Using Unmanned Aircraft Systems (UAS) in Transportation Infrastructure Asset Maintenance. \$93,894.

2018 – Certified Professional Constructor Online Preparation Course. \$21,944.

2018 – Revised AC Exam Study Guide Practice Test. \$1,896.

2015 – Provide Enhanced Preparation Material for the Associate Constructor Exam Phase Two – Principle Investigator. \$23,895.

2015 – Provide Enhanced Preparation Material for the Associate Constructor Exam Phase One – Principle Investigator. \$21,796.

2015 – University Research Grant Committee Project Initiation Grant – Co-Principle Investigator. \$8,500.

2014 – Department of Construction Science & Management Industry Advisory Board Faculty Research Grant - Interactive 3D Training Simulation for Electrical Code Violations – Principle Investigator. \$20,000.

2014 – Pennell Research Grant - Improving the HERS Index's Model of Residential Miscellaneous Electrical Loads – Principle Investigator. \$5,000.

2014 – AAH Faculty Research Grant - Alternative Methods of Modeling Residential Miscellaneous Electrical Loads – Principle Investigator. \$3,000.

PRESENTATIONS

(SCDOT) 2019 Highway Engineers Conference; Columbia, SC. (2019) Drones and the SCDOT: Where we are and where we are going.

South Carolina Information Technology Directors Association; Columbia, SC. (2018) Use of Unmanned Aerial Systems to Augment Bridge Inspections.

Associated Schools of Construction Annual Proceedings; Minneapolis, MN. (2018) Perception of the AC Exam by Pass or Fail Status.

Associated Schools of Construction Annual Proceedings; Minneapolis, MN. (2018) Quantifying the Cache: The Premium for Solar Homes is Not Explained by Reduced Energy Costs.

Associated Schools of Construction Annual Proceedings; Minneapolis, MN. (2018) Discussion Round Table Leader for Improvement of the Instruction of Construction Estimating.

American Council for Construction; Atlanta, GA. (2016) Presentation of New Associate Constructors Study Guide and Online Preparation Classes.

Associated Schools of Construction Annual Proceedings; Provo, UT. (2016) Leveraging Immersion Technologies in Construction Management Education: A National Electrical Code 3D Simulation Tool.

Associated Schools of Construction Annual Proceedings; Provo, UT. (2016) Discussion Round Table Leader for Improvement of the Instruction of HVAC and Electrical Systems.

American Institute of Constructors Annual Forum; San Diego, CA. (2016) Presentation of Revised Associated Constructor Exam Study Guide.

15th International Conference on Construction Applications of Virtual Reality (CONVR2015); Banff, Canada. (2015) Using 3D Simulation to Improve Construction Management Education: A Pilot Study to Teach the NFPA70-National Electrical Code.

Associated Schools of Construction Annual Proceedings; Washington, DC. (2014) Can “Flipping the Classroom” Improve the Educational Experience in Construction Management Courses: A Case Study in Teaching HVAC Psychrometrics.

iiSBE Net Zero Built Environment 2014. 17th Rinker International Conference. Gainesville, FL. (2014) Energy Modeling as Part of a Comprehensive Residential NZE Strategy.

Associated Schools of Construction Annual Proceedings; San Luis Obispo, CA. (2013) Reducing Residential Miscellaneous Electrical Loads with a Whole-House Switch.

SERVICE AS REFEREE FOR JOURNALS

November, 2019. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Curriculum to Prepare AEC Students for BIM-Enabled Globally Distributed Projects

October, 2018. Reviewed Manuscript for the Professional Constructor Journal. Title: Social Resources of Mechanical Contracting Management Personnel

May, 2018. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Teaching strategies for non-technological skills of building information modeling

November, 2017. Reviewed Manuscript for the Professional Constructor Journal. Title: An Analysis of Suitable Materials for Tiny Home Construction

November, 2017. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Life Cycle Energy Analysis of a Residential Building Constructed for Economically Weaker Section Community in India

August, 2017. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Construction Disputes in the United States and the United Kingdom: A Comparison

May, 2017. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: The Effect of Course Time Compression on Academic Performance in Construction Surveying

January, 2017. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Expectation of Industry & Students' Perceptions on

Essential Sustainability Knowledge: A Comparative Analysis

August, 2016. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Construction Disputes in the United States and the United Kingdom: A Comparison

September, 2016. Reviewed Manuscript for the Professional Constructor Journal. Title: Implementing Situational Awareness in the Uses of Unmanned Systems to Increase Data Efficiencies and Safety: A Theoretical Construct for Progressive Construction Techniques

September, 2016. Reviewed Manuscript for the International Journal of Construction Education and Research. Title: Applications, Enrollment, Attendance, and Student Performance in Rebuilt School Facilities: A Case Study

April, 2016. Reviewed Manuscript for the journal of Energy Research & Social Science. Title: Energy Reduction Competitions: The Missing Link for Achieving Significant Energy Savings

June 2015. Reviewed Manuscript for the Professional Constructor Journal. Title: "Investigation of Project Risk Factors Facing Construction Management Firms"

March 2015. Reviewed Manuscripts for Energy Efficiency (Springer). Title: "Energy-Efficient Residential Heating and Air Conditioning System Installations: Beyond Simple Cost-Effectiveness Criteria"

February 2015. Reviewed Manuscript for Energy Research & Social Science (ELSEVIER) Title: "Energy-Efficient Residential Heating and Air Conditioning System Installations: Beyond Simple Cost-Effectiveness Criteria."

October 2014. Reviewed Manuscript for International Journal of Injury Control and Safety Promotion (Taylor & Francis). Title: "Safety Concerns Related to Modular / Prefabricated Building Construction."

June 2014. Reviewed Manuscript for Energy Efficiency (Springer). Title: "Analysis of the Energy Index as a Benchmarking Indicator of Potential Energy Savings in the San Antonio, Texas Single Family Residential Sector."

June 2014. Reviewed Manuscript for The Professional Constructor journal. Title: "Solar Orientation for Low-Energy Residential Building in Pagosa Springs, Colorado."

December 2013. Poster Reviewer for the Associated Schools of Construction's Annual Conference.

November 2013. Reviewed Manuscript for The Professional Constructor journal. Title: "Applied Research Directions for Electrical Contracting Industry."

October 2013. Reviewed Manuscript for Energy Efficiency (Springer). Title: "Evaluating Ten Years of Energy Performance of HERS-Rated Homes in Alachua County, Florida."

June 2013. Reviewed Manuscript for The Professional Constructor journal. Title: "Life Cycle Energy Analysis of Production Scale Residential Energy Efficient Features."

June 2013. Reviewed Manuscript for Energy Efficiency (Springer). Title: "Passive Energy Strategies in the Retrofitting of the Residential Sector: A Practical Spanish Case Study."

January 2013. Reviewed Manuscript for Energy and Buildings (Elsevier). Title: "Energy-saving Scheduling Optimization under Up-peak Traffic for Group Elevator System in Building."

September 2012. Reviewed Manuscript for Energy Efficiency (Springer). Title: "Feasibility Assessment of Using the KIP System to Achieve an Energy-saving Effect for an Electronic Marquee."

SERVICE

2019. CSM Department Chair Review Committee. (chair)

2018 – 2019. CSM Faculty Search and Screening committee. (member)

2019 – Present. CAAH Faculty Research and Development Program (member)

2015 – Present. American Institute of Constructor Board Member

2015 – Present. AIC/CCC Associate Constructor Exam Writing Committee

2015 – Present. ASC Region 2 Student Commercial Competition Coach

➤ 2018 – 3rd Place

- 2017 – 2nd Place and Best Presentation
- 2016 – 2nd Place and Best Presentation Shadow Competition
- 2015 – 2nd Place and Best Presentation

2014 – Present. CSM Departments Faculty Honors and Awards Committee
(chair)

2013 – Present. Faculty Advisor for AGC Student Chapter

2014 – Present. College of AAH Faculty Honors and Awards Committee
(member)

2016 – 2017. CSM Department Chair Search and Screening Committee
(chair)

2015 – 2016. CSM Faculty Search and Screening committee.

2014 – 2015. CSM Department Chair Reappointment Committee (member)

2013 – 2014. CSM Bylaws Revision Committee (member)

2014. Faculty advisory for Dept. of Energy Student Challenge Home
Competition. (subject matter expert award received at competition)

MEMBERSHIPS

The Honor Society of Phi Kappa Phi

American Institute of Constructors