

Amelia Celozza, Ph.D.

Assistant Professor

Department of Civil, Environmental, and Architectural Engineering

University of Colorado Boulder

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Education

University of Texas at Austin, PhD, May 2022

Department of Civil, Architectural and Environmental Engineering

Construction Engineering and Project Management Program

Dissertation: The Impact of Contractual and Legal Factors on Information Management in AEC Project Delivery

Supervisors: Dr. Fernanda Leite, PE and Dr. Daniel P. de Oliveira

Stanford University, Master of Science, December 2014

Department of Civil and Environmental Engineering

Sustainable Design and Construction Program

Arizona State University, Bachelor of Science in Engineering, May 2013

School of Sustainable Engineering and the Built Environment

Civil and Environmental Engineering

Barrett, the Honors College

Minor in Mathematics

Professional Experience

Assistant Professor

Department of Civil, Environmental, and Architectural Engineering

University of Colorado Boulder

August 2022 – Present

Graduate Research Assistant

Construction Industry Institute

University of Texas at Austin

September 2018 – May 2022

Senior Construction Contracts Manager

Tesla, Inc.

September 2016 – July 2018

Construction Contracts Manager

Tesla, Inc.

January 2015 – September 2016

Graduate Researcher

Center for Integrated Facilities Engineering (CIFE)
Stanford University

January 2014 – December 2014

Teaching Assistant

Department of Civil and Environmental Engineering
Stanford University

September 2014 – December 2014

Select Awards

- Outstanding Reviewer for the ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 2022
- Cullen M. Crain Endowed Scholarship in Engineering, University of Texas at Austin, 2021–2022
- Construction Law Foundation of Texas Fellowship, University of Texas at Austin, 2021
- Engineering Foundation Endowed Graduate Presidential Fellowship, University of Texas at Austin, 2020 – 2021
- Construction Law Foundation of Texas Fellowship, University of Texas at Austin, 2020
- AGC Education and Research Graduate Scholarship, Associated General Contractors Education and Research Foundation, 2019 – 2020
- Tucker Hudson Kumar Endowed Presidential Fellowship, University of Texas at Austin, 2018 – 2019
- Graduate School Mentoring Fellowship, University of Texas at Austin, 2018 – 2019
- Dean E. Stephan and Charles Pankow Builders Fellowship, Stanford University, 2013 – 2014

Publications

Underline denotes Celozza's student advisee (primary advisor)

†Denotes Celozza's PhD advisors

Peer-Reviewed Journal Articles Published

- [J5] **Celozza, A.**, de Oliveira, D. P.[†], and Leite, F.[†] 2023. "Role of BIM Contract Practices in Stakeholder BIM Implementation on AEC Projects." *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 15 (2). <https://doi.org/10.1061/JLADAH.LADR-916>.
- [J4] **Celozza, A.**, de Oliveira, D. P.[†], and Leite, F.[†] 2023. "Qualitative Analysis of the Impact of Contracts on Information Management in AEC Projects." *Journal of Construction Engineering and Management*, 149 (3). <https://doi.org/10.1061/JCEMD4.COENG-12359>. (*Selected for the Editor's Choice Collection*)
- [J3] **Celozza, A.**, de Oliveira, D. P.[†], and Leite, F.[†] 2021. "Identification and Ranking of Legal Factors Impacting Information Management in the AEC Industry Using the Delphi Method."

Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 13 (3), 04521011. [https://doi.org/10.1061/\(ASCE\)LA.1943-4170.0000494](https://doi.org/10.1061/(ASCE)LA.1943-4170.0000494).

- [J2] **Celozza, A.**, Leite, F.[†], and de Oliveira, D. P.[†] 2021. “Impact of BIM-related Contract Factors on Project Performance.” Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 13 (4), 04521022. [https://doi.org/10.1061/\(ASCE\)LA.1943-4170.0000478](https://doi.org/10.1061/(ASCE)LA.1943-4170.0000478).
- [J1] Mehdizadeh, R., Fischer, M., and **Celozza, A.** 2013. “LEED and Energy Efficiency: Do Owners Game the System?” Journal of Sustainable Real Estate, 5 (1), 23-34. <https://doi.org/10.1080/10835547.2014.12091845>.

Peer-Reviewed Conference Publications Published

- [C4] **Celozza, A.** “Project Information Management Practices for Digital Asset Delivery.” Engineering Project Organization Conference 2023. (Extended Abstract)
- [C3] **Celozza, A.**, de Oliveira, D. P.[†], and Leite F. [†] 2022. “Longitudinal Study of Information Management in University Construction Contracts.” Construction Research Congress 2022. <https://doi.org/10.1061/9780784483978.008>.
- [C2] **Celozza, A.**, Leite, F.[†], and de Oliveira, D. P.[†] 2022. “Construction Industry Institute’s Impact on Construction Engineering and Management Academic Publications.” Construction Research Congress 2022. <https://doi.org/10.1061/9780784483985.005>.
- [C1] **Celozza, A.**, de Oliveira, D. P.[†], and Leite, F.[†] 2023. "Association of BIM-related Contract Language and BIM Use on Construction Projects." Canadian Society of Civil Engineering Annual Conference 2021. https://doi.org/10.1007/978-981-19-1029-6_20.

Peer-Reviewed Conference Publications Accepted

- [CS2] Lopez Alvarez de Neyra, P., and **Celozza, A.** “Deconstruction Information Model-Based Material Passports for promoting Circular Economy in the Architecture, Engineering, and Construction Industry through the use of Building Information Modeling: A literature review.” Submitted to Construction Research Congress 2024.
- [CS1] **Celozza, A.**, and Lopez Alvarez de Neyra, P. “BIM Applications to Support Circular Economy: A Literature Review.” Canadian Society of Civil Engineers Conference 2023.

Research Report

- [RR1] Pratt, M. P., Geedipally, S. R., Pike, A. M., Carlson, P. J., **Celozza, A. M.**, and Lord, D. 2014. “Evaluating the Need for Surface Treatments to Reduce Crash Frequency on Horizontal Curves.” Report FHWA/TX-14/0-6714-1. <https://rosap.nrl.bts.gov/view/dot/27366>.

Other Conference Proceedings, Posters, and Presentations

- [OC1] **Celozza, A.**, de Oliveira, D. P.[†], and Leite, F.[†] “Role of BIM Contract Practices in Stakeholders BIM Implementation on AEC Projects.” Presented at the ASCE Construction Institute Summit 2023.

Invited Professional Presentations

- [P1] “Building Information Modeling and Contracts: Setting Up Projects for Success.” University of Texas at Arlington, *Construction Contracts, Specifications & Administration*. October 13, 2022.

Research Support

Current Support

- [R2] Guidelines for a Supplier Qualification Program to Improve Project Performance: An Exploratory Study. *Construction Industry Institute*. PI: Celozza. Nov. 2023 – Jul. 2024. \$30,000 Total CU.
- [R1] MEP Contractors and GCs: What is the cost of inexperience? *ELECTRI International Partnership for Career Advancement*. PI: Celozza. Aug. 2023 – Aug. 2024. \$30,000 Total CU.

Teaching

New Course Development

CVEN 5836 Building Information Modeling for Capital Projects, Graduate Course, 3 credits hours. Creating a new course for students focusing on building information modeling (BIM) for capital projects. Students will gain knowledge on the implementation of BIM throughout a building’s lifecycle, from planning and design through construction and operations. This project-based course covers topics including an introduction to BIM, setting up projects for success, model-based cost estimating, 4D simulation, and design coordination.

Courses Taught

Course Number	Course Name	Type of Class	Semester	Number of Students
AREN 2050	Building Systems and Materials	Undergraduate Requirement	Fall 2022	46
			Fall 2023	47
CVEN 5836	Building Information Modeling for Capital Projects	Graduate Elective	Spring 2023	13

Student Advising

All titles shortened for brevity

¹MS thesis option; ²MS report option; ³MS capstone

Current Graduate Student Committee Chaired

Paula Lopez Alvarez de Neyra	PhD	Materials Passports and BIM	Expected 2026
Malek Alazzam	PhD	TBD	Expected 2027

Current Graduate Committee Participation (other than primary advisor)

Jazmin Lopez	PhD	Use of Virtual Reality for Safety Training	2022 – present
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Former Graduate Committee Participation (other than primary advisor)

Erin Sagisi	MS ¹	Transitioning Airfield Rating Systems	Graduated 2023
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Other Graduate Student Advising

Eric England	MS ³	BIM and Digital Twin for NAVFAC	Graduated 2023
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Undergraduate Research Advising

Julia Dykstra	DLA	Existing Building Information	2023 – present
Dana Majer	URA	Supplier Qualification Practices	2024 – present

Note: DLA = Discovery Learning Apprenticeship Program; URA = Undergraduate Research Assistant

Service Activities

Committee Participation

National

- Construction Industry Institute, Supply Chain Management Community of Business Advancement, Academic Advisor, 2022 – present
- Construction Research Congress, 2023 – present
- ASCE Visualization, Information Modeling, and Simulation (VIMS) Committee, Member, 2021 – present

Department

- Graduate Recruiting and Admissions Committee, Department of Civil, Environmental and Architectural Engineering, University of Colorado Boulder, 2022 – present
- Search Committee, Tenure-Track Position in Construction Engineering and Management within the Department of Civil, Environmental and Architectural Engineering, University of Colorado Boulder, 2022 – 2023

Proposal Panel

Internal CU Boulder

- Reviewer for CU Boulder's Research & Innovation Seed Grant Program, Spring 2023

Journal Editorial Board

- Assistant Specialty Editor, Journal of Construction Engineering and Management, 2023 – present

Journal Reviewer

- Journal of Construction Engineering and Management
- Journal of Management in Engineering
- Journal of Architectural Engineering
- Journal of Legal Affairs and Dispute Resolution in Engineering and Construction
- Engineering, Construction, and Architectural Management

Conference

- 2024 ASCE Construction Research Congress, Track Co-Chair for Project and Organizational Management and Planning
- 2024 Engineering Project Organization Conference, Technical Co-chair

Professional Development

- ASCE ExCEEEd (Excellence in Civil Engineering Education) Teaching Workshop. Summer 2023 (40 hours)
- SafeZone Training, Center for Inclusion and Social Change, University of Colorado Boulder, October 2022 (1 hour)
- Principal Investigator Academy, Research & Innovation Office, University of Colorado Boulder
 - PI Academy Kickoff, August 2022 (1 hour)
 - Time Management, September 2022 (1 hour)
 - Avenues to External Funding, November 2022 (1 hour)
 - Elements of Strong One Page Proposal, December 2022 (1 hour)
 - Strategic Career Planning, May 2023 (1 hour)
- Thriving at CU, Office of Faculty Affairs, University of Colorado Boulder
 - Thriving in the First Year, September 2022 (1 hour)
 - Thriving in the Classroom, October 2022 (1 hour)
 - Thriving in the Community, November 2022 (1 hour)
 - Thriving as a Scholar, December 2022 (1 hour)
- Fall Center for Teaching and Learning Intensive, University of Colorado Boulder, August 2022
 - Grading in Canvas (1 hour)
 - Panel Discussion I: What I Wish I Had Known When I Started Teaching in Higher Education (1 hour)
 - Student Centered Pedagogy: Accommodating the Diverse Needs of Our Students (1 hour)
 - Supporting learning through collaboration, connection, and community with the University Libraries (1 hour)
 - Flipping the Class for the Skeptic (1 hour)
 - Using Technology to Engage your Students (1 hour)
- Autodesk Construction School, August 2022 (6 hours)

- Course Design and Academic Technology Overview for New Faculty, Center for Teaching and Learning, University of Colorado Boulder, July 2022 (2.5 hours)
- Construction Faculty Teaching Excellence Program, July 2022 (6 hours)
- Advanced Teaching Preparation Certification, Faculty Innovation Center, University of Texas at Austin, 2020

Professional and Honorary Society Memberships

- American Society of Civil Engineers (ASCE), Associate Member, 2022 – present
- Chi Epsilon Civil Engineering Honor Society, Member, 2013 – present
- Tau Beta Pi Engineering Honor Society, Member, 2013 – present

Professional Registration and Certification

- OSHA 30-hour certification, Issued October 2015
- Engineer in Training (EIT), Issued August 2014