

EDUARDO J. MONTALTO

Assistant Professor
Structural Engineering and Structural Mechanics
Department of Civil, Environmental and Architectural Engineering
University of Colorado Boulder

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EDUCATION

Ph.D

Year of completion: 2025
Department of Civil and Environmental Engineering
University of California, Berkeley
Advisor: Dr. Dimitrios Konstantinidis
Dissertation: Reinforcement Bending Effects on the Lateral Response and Stability of Elastomeric Seismic Isolators

M.S.

Year of completion: 2020
Department of Civil and Environmental Engineering
University of California, Berkeley
Advisor: Dr. Dimitrios Konstantinidis
Report: Modeling of the Lateral Behavior of Unbonded Fiber Reinforced Elastomeric Isolators

B.S.

Year of completion: 2016
Department of Civil Engineering
University of Costa Rica
Advisor: Prof. Yi Cheng Liu-Kuan
Thesis: Finite Element Model Updating of Tenorio River Bridge on National Route No. 1 based on an Operational Modal Analysis

PROFESSIONAL EXPERIENCE

Assistant Professor

Time Period: 2026 - present
Department of Civil, Environmental and Architectural Engineering
University of Colorado Boulder

Design Engineer

Time Period: 2016 - 2019
FSA Ingeniería & Arquitectura

PUBLICATIONS

Peer-Reviewed Journal Publications

- 4 **E. J. Montalto**, D. Konstantinidis, and N. M. Ankem. "Phenomenological modeling of fiber-reinforced elastomeric isolators at multiple lateral deformation levels". In: *Earthquake Engineering & Structural Dynamics* 53.11 (2024), pp. 3335–3357. DOI: [10.1002/eqe.4173](https://doi.org/10.1002/eqe.4173)
- 3 **E. J. Montalto** and D. Konstantinidis. "Effective Warping Properties and Buckling Analysis of Fiber-Reinforced Elastomeric Isolators". In: *Journal of Engineering Mechanics* 150.5 (2024), p. 04024018. DOI: [10.1061/JENMDT.EMENG-7395](https://doi.org/10.1061/JENMDT.EMENG-7395)
- 2 **E. J. Montalto** and D. Konstantinidis. "Buckling of Short Beams Considering Shear Warping: Application to Fiber-Reinforced Elastomeric Isolators". In: *Journal of Engineering Mechanics* 150.1 (2024), p. 04023105. DOI: [10.1061/JENMDT.EMENG-7198](https://doi.org/10.1061/JENMDT.EMENG-7198)
- 1 **E. J. Montalto-Bolaños** and Y. C. Liu-Kuan. "Prueba de vibración ambiental de puente tipo viga cajón de concreto presforzado". In: *Métodos & Materiales* 6.1 (2017), pp. 8–17. DOI: [10.15517/mym.v6i1.25421](https://doi.org/10.15517/mym.v6i1.25421)

Peer-Reviewed Conference Publications

- 6 **E. J. Montalto** and D. Konstantinidis. "Effects of Reinforcement Thickness on the Response of Elastomeric Seismic Isolators". In: *Proceedings of the 19th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures*. Berkeley, CA, USA: Anti-Seismic Systems International Society, 2025
- 5 **E. J. Montalto** and D. Konstantinidis. "Two-Scale Modeling Framework for Elastomeric Isolators". In: *Proceedings of the 19th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures*. Berkeley, CA, USA: Anti-Seismic Systems International Society, 2025
- 4 **E. J. Montalto** and D. Konstantinidis. "Mechanical Response of Fiber-Reinforced Elastomeric Isolators Under Vertical and Lateral Loading". In: *Proceedings of the 18th World Conference on Earthquake Engineering*. Milan, Italy: International Association for Earthquake Engineering, 2024
- 3 **E. J. Montalto**, D. Konstantinidis, and N. M. Ankem. "Dynamical Modeling of Fiber-Reinforced Elastomeric Isolators at Multiple Lateral Deformation Levels". In: *Proceedings of the 18th World Conference on Earthquake Engineering*. Milan, Italy: International Association for Earthquake Engineering, 2024
- 2 **E. J. Montalto** and D. Konstantinidis. "Dynamic modeling of the lateral response of unbonded fiber-reinforced elastomeric isolators". In: *Proceedings of the 3rd International Conference on Natural Hazards and Infrastructure*. Ed. by G. Gazetas and I. Anastasopoulos. Athens, Greece: National Technical University of Athens, 2022
- 1 **E. J. Montalto** and E. Guevara. "Structural Design of 48m Tall Automated Parking Building Using Nonlinear Analysis". In: *Proceedings of the Structures Congress 2019, XIIV Seminar of Structural and Earthquake Engineering*. San Jose, Costa Rica: Costa Rican Association of Structural and Earthquake Engineering, 2019

PRESENTATIONS

Presentations related to peer-reviewed conference publications are not included in this section.

Conferences

- 4 **E. J. Montalto** and D. Konstantinidis. *Multiscale Modeling of Short Hyperelastic Composite Rods: Application to Elastomeric Isolators*. 16th World Congress on Computational Mechanics. Vancouver, Canada, 2024
- 3 **E. J. Montalto** and D. Konstantinidis. *Multiscale Modeling of Elastomeric Seismic Isolators*. 18th World Conference on Earthquake Engineering. Milan, Italy, 2024
- 2 **E. J. Montalto** and D. Konstantinidis. *Multiscale Modeling of Elastomeric Seismic Isolators*. Engineering Mechanics Institute Conference. Chicago, IL, USA, 2024
- 1 **E. J. Montalto** and D. Konstantinidis. *Buckling of Short Beams Considering Warping with Application to Fiber-Reinforced Elastomeric Isolators*. Engineering Mechanics Institute Conference. Atlanta, GA, USA, 2023

Workshops and Seminars

- 2 **E. J. Montalto** and D. Konstantinidis. *Effects of Reinforcement Characteristics on the Response and Stability of Elastomeric Isolation Systems*. PEER Researchers' Workshop. Berkeley, CA, USA, 2025
- 1 **E. J. Montalto** and D. Konstantinidis. *Buckling Of Short Beams Considering Warping: Application To Fiber-Reinforced Elastomeric Isolators*. Berkeley/Stanford Computational Mechanics Festival. Palo Alto, CA, USA, 2022

TEACHING AND ADVISING

Courses

Course: CVEN 3161 Mechanics of Materials I
Spring 2026 Number of Students: 71 Instructor Rating:
Role: Instructor of Record

Course: CIVENG C30 Introduction to Solid Mechanics
Fall 2025 Number of Students: 122 Instructor Rating:
Role: Graduate Student Instructor

Course: CIVENG 220 Structural Analysis Theory and Applications
Fall 2023 Number of Students: 56 Instructor Rating: 6.68/7.00
Role: Graduate Student Instructor

Course: CIVENG 132 Applied Structural Mechanics
Spring 2023 Number of Students: 25 Instructor Rating: 6.63/7.00
Role: Graduate Student Instructor

Course: CIVENG 223 Earthquake Protective Systems
Spring 2021 Number of Students: 26 Instructor Rating: 4.50/5.00
Role: Graduate Student Instructor

Course: CIVENG 123L Concrete Design Project
Spring 2020 Number of Students: 13 Instructor Rating: 4.50/5.00
Role: Graduate Student Instructor

Course: CIVENG 122L Steel Design Project
Spring 2020 Number of Students: 5 Instructor Rating: 4.67/5.00
Role: Graduate Student Instructor

SERVICE & PROFESSIONAL DEVELOPMENT

Service to the Discipline and Profession

Journal Reviewer

Construction and Building Materials, Journal of Bridge Engineering, International Journal of Solids and Structures

HONORS, AWARDS & SCHOLARSHIPS

National and International

- Applied Technology Council Diversity in Structural Engineering Scholarship, NCSEA (2024)
- Structural Stability Student Competition Winner, Engineering Mechanics Institute (2023)
- O. H. Ammann Research Fellowship in Structural Engineering, ASCE (2022)

Department, College and University

- Outstanding Graduate Student Instructor Award, UC Berkeley (2024)
- The Harry H. Hilp Fellowships in Engineering, UC Berkeley (2023)
- H2H8 Graduate Research Grant to Advance Humanity, Hearts to Humanity Eternal Association (2023)
- The Professor Alex & Georgia Scordelis Fellowship in Structural Engineering, UC Berkeley (2022)
- Honors Graduation, University of Costa Rica (2016)
- Highest GPA in Department of Civil Engineering, University of Costa Rica (2014)
- Highest GPA in College of Engineering, University of Costa Rica (2013)
- Highest GPA in Department of Civil Engineering, University of Costa Rica (2013)
- Academical Excellence Scholarship, University of Costa Rica (2011-2016)

PROFESSIONAL MEMBERSHIPS & LICENSURES

Memberships

- Engineering Mechanics Institute Stability Committee (since 2023)
- American Society of Civil Engineers (since 2020)
- Earthquake Engineering Research Institute (since 2019)
- Costa Rican Association of Structural and Earthquake Engineering (since 2017)
- Costa Rican Federate College of Engineers and Architects (since 2016)

Licenses

- Registered Professional Civil Engineer, Costa Rica, License IC-29788