Dustin T. Cook, P.E.

Email: dustin.cook@colorado.edu

Website: https://dcook519.github.io/

Education	Currently Pursuing Ph.D. University of Colorado, Boulder Department of Civil, Environmental, and Architectural Engineering	2017-Present 3.9 GPA
	M.S. University of California, Los Angeles Department of Civil and Environmental Engineering	2013-2014 3.6 GPA
	B.S California State University, Chico Department of Civil and Environmental Engineering	2006-2012 3.7 GPA
Work Experience	Research Engineer, Technical Developer, and Seismic Risk Consultant Haselton Baker Risk Group, LLC Facilitated software development through the scrum process. Developed software for performance based earthquake engineering. Researched and developed new methods for structural response and performance model population to expedite the PBEE and risk assessment process. Assisted clients in performing risk assessments.	2014-Present
	Junior Structural Engineer Culp and Tanner, Inc. Structural Engineers Reviewed shop drawings from reinforced concrete, post tensioned, and steel components. Aided in the design of reinforced concrete columns for a parking garage system.	2014-2015
Teaching Experience	Teaching Assistant: Reinforced Concrete Design and Senior Design University of Colorado, Boulder: CEAE Department	2018-2019
	Lecturer of Civil Engineering: Statics Lecture and Activity Session California State University Chico: Department of Civil Engineering	2015-2016
	Instructor of Civil Engineering: Statics Activity Session California State University Chico: Department of Civil Engineering	2013
	Undergraduate Instructor: Mechanics of Materials Extra Session California State University Chico: Department of Construction Management	2012
Research Experience	ATC-134: Performance-Based Seismic Engineering: Benchmarking of Existing Building Evaluation Methodologies Funded by the National Institute of Science and Technology (NIST) Working group member. Comparing ASCE 41 analytical model with the response of a historic structure.	2017-Present
	ATC-123: Improving Seismic Design of Buildings with Configuration Irregularities Funded by the Federal Emergency Management Agency (FEMA) Working group member. Analytically investigated response of modern RC moment frame structures with vertical irregularities.	2015-2018

ATC-58-2: Development of Performance Based Seismic

Design Guidelines: Phase 3

2014-2017

Funded by the Federal Emergency Management Agency (FEMA)

Working group member. Helped develop guidelines, resources, and methods for the improvement of the FEMA P-58 method.

NEESR-CR: Full-Scale RC and HPFRC Frame Subassemblies Subjected to Collapse-Consistent Loading Protocols for Enhanced Collapse Simulation and Internal Damage Characterization

2012-2017

Funded by the National Science Foundation (NSF)

Working group member. Developed near fault loading protocols for experimental tests of RC moment frame subassemblies.

2012 PEER Summer Internship Program

Summer 2012

Funded by the National Science Foundation (NSF)

Student Intern. Experimentally investigated shear wall boundary element behavior under Prof. Jack Moehle.

Publications and Presentations

Cook, Liel, Luco, Almeter, and Haselton. *Implications of Seismic Design Values for Economic Losses*. Paper and Presentation at the 13th International Conference on Applications of Statistics and Probability in Civil Engineering, ICASP13, Seoul, South Korea, 2019.

Cook, Liel, and Haselton. *Benchmarking of Seismic Loss Estimations from FEMA P-58 Compared to Other Methods.* Presentation at ASCE & SEI Structures Congress, 2019.

Wade, Debock, Haselton, **Cook**, and Almeter. Expected Performance of New Building-Code-Compliant Buildings in California. Paper in the SEAOC Convention, 2018.

Cook, Wade, Haselton, Baker, and DeBock. A Structural Response Prediction Engine to Support Advanced Seismic Risk Assessment. Paper in the 11th National Conference on Earthquake Engineering, 2018.

Haselton and **Cook**. Resilient Seismic Design Using Prescriptive and Non-Prescriptive Design Methods. Paper in the 11th National Conference on Earthquake Engineering, 2018.

Debock, **Cook**, Haselton, and Wade. New Developments for Rapid Seismic Risk Assessment of Wood Light-Frame Buildings. Paper in the 11th National Conference on Earthquake Engineering, 2018.

Debock, Wade, **Cook**, Haselton, Valley, and Sabol. *Quantitative Assessments of Code Provisions for Vertical Building Irregularities in Frame Buildings*. Paper in the 11th National Conference on Earthquake Engineering, 2018.

Wade, Debock, Lawson, Koliou, **Cook**, and Haselton. *Seismic Risk Assessment of Tilt-Up Buildings using the FEMA P-58 Method*. Paper in the 11th National Conference on Earthquake Engineering, 2018.

Debock, Fitzgerald, Cook, Haselton. New Developments in FEMA P-58 Seismic Risk Assessment of Wood Light-Frame Buildings. Paper and Presentation at the SEAOC Convention, 2016.

Cook, Fitzgerald, Chrupalo, Haselton, Baker. *Building Loss Estimation Methods: A Comparison of Methods and Recommendations for the Future.* Paper and Presentation at the ATC & SEI, 2nd Conference on Improving the Seismic Performance of Existing Buildings and Other Structure, 2015.

Fitzgerald, **Cook**, Haselton. Building Loss Estimation Methods: NSF NEESR Full-Scale Ductile RC Columns Subjected to Collapse-Consistent Loading Protocols: Learning from the Test Data and Recommendations for Simulating Collapse Behavior and Estimating Building Collapse Safety. Paper and Presentation at the ATC & SEI, 2nd Conference on Improving the Seismic Performance of Existing Buildings and Other Structure, 2015.

Haselton, Cook, Fitzgerald, Baker. Progress on Resilience-Based Seismic Design and Assessment Supported by Advanced Prediction of Building Damage, Repair Cost, and Building Closure Time. Paper and Presentation at the ATC & SEI, 2nd Conference on Improving the Seismic Performance of Existing Buildings and Other Structure, 2015.

Tremayne, Mahin, Anderson, Cook, Erceg, Esparza, Jimenez, Krausz, Lo, Lopez, McCurdy, Shipman, Strum, Earthquake Engineering for Resilient Communities: 2012 PEER Internship Program Research Report Collection. Paper published by PEER 2012/07.

Affiliations

- Professional Earthquake Engineering Research Institute
 - Earthquake Engineering Research Institute Younger Members Committee: Interim Secretary
 - American Society of Civil Engineers