Dustin T. Cook, P.E.

Education

Currently Pursuing Ph.D. University of Colorado, Boulder — **2017-Present**
Department of Civil, Environmental, and Architectural Engineering — 3.9 GPA

M.S. University of California, Los Angeles — **2013-2014**
Department of Civil and Environmental Engineering — 3.6 GPA

B.S California State University, Chico — **2006-2012**
Department of Civil and Environmental Engineering — 3.7 GPA

Work Experience

Research Engineer, Technical Developer, and Seismic Risk Consultant — **2014-Present**
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.

Junior Structural Engineer — **2014-2015**
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.

Teaching Experience

Teaching Assistant: Reinforced Concrete Design and Senior Design — **2018-2019**
University of Colorado, Boulder: CEAE Department

Lecturer of Civil Engineering: Statics Lecture and Activity Session — **2015-2016**
California State University Chico: Department of Civil Engineering

Instructor of Civil Engineering: Statics Activity Session — **2013**
California State University Chico: Department of Civil Engineering

Undergraduate Instructor: Mechanics of Materials Extra Session — **2012**
California State University Chico: Department of Construction Management

Research Experience

ATC-134: Performance-Based Seismic Engineering: Benchmarking of Existing Building Evaluation Methodologies — **2017-Present**
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.

ATC-123: Improving Seismic Design of Buildings with Configuration Irregularities — **2015-2018**
Funded by the Federal Emergency Management Agency (FEMA)
Working group member. Analytically investigated response of modern RC moment frame structures with vertical irregularities.

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, Haselton, 2019. *Implications of Seismic Design Values for Economic Losses*. Paper and Presentation at the13th International Conference on Applications of Statistics and Probability in Civil Engineering, ICASP13, Seoul, South Korea, 2019.

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

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

Debock, Wade, **Cook**, Haselton, Valley, Sabol. *Quantitative Assessments of Code Provisions for Vertical Building Irregularities in Frame Buildings*. Paper and Presentation at 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.

Professional Affiliations

- Earthquake Engineering Research Institute
- Earthquake Engineering Research Institute Younger Members Committee
- American Society of Civil Engineers