Claudia Marin-Artieda, PE, Ph.D.
Howard University, Washington, DC 20059
Professor, Department of Civil and Environmental Engineering
Email: cmarin@Howard.edu

Education

B.S., Civil Engineering, Universidad de Medellin, Colombia, 1993 (169 credit hours)
M.S., Structural and Computational Mechanics, State University of New York at Buffalo, 2003
Ph.D., Earthquake and Structural Engineering, State University of New York at Buffalo, 2007
Research Scientist (Postdoctoral), SUNY at Buffalo, Buffalo, New York, 2007 - 2008

Professional Experience

Professor of Civil and Environmental Engineering, Howard University, 2020 – Present
Interim Director University Transportation Centers (UTCs), Howard University, 2024 - Present
Associate Professor, Howard University, 2014-2020
Assistant Professor, Howard University, 2008-2014
Assistant Chair, Civil and Environmental Engineering, Howard University, 2016-2017
Graduate Student Director, Civil and Environmental Engineering Department, Howard University, 2010-Present
Adjunct Instructor, Universidad de Medellin, 1994-1995
Research Assistant, SUNY at Buffalo, 2002-2007
Research Scientist, SUNY at Buffalo, 2007-2008
Structural Engineer, Mejia Villegas S.A, 1994-2002
Structural Engineer, Igestructuras S.A, 1993-1994

Professional Civil Engineering Experience

Structural Engineer, Mejia Villegas S.A., Medellin, Colombia (1994-2000)
Structural Engineer, Igestructuras S.A., Medellin, Colombia (1993-1994)
Assistant Engineer, Department of Public Works of Antioquia, Colombia (1992)

Professional Registration

AR (No. 13846), N.Y. (No. 095333), D.C. (No. PE907047), M.D. (No. 42869), V.A. (No. 051608)

Fellowships, Honors, and Awards

Fulbright Scholar, 2000-2002
NSF CAREER Award, 2012-2019
NSF ENHANCE Fellow, 2013-2015
Award for Curricular Advancement, VIP Consortium, 2023
Advisor of the Second-place Team in the 2020 Concrete Construction Competition
Best Paper Presentation, 6th AAWE Workshop, AAWE, 2021
CEACS CETLA Fellow, 2013-2014
Faculty Incentive Program-HU Provost Office, 2016
Mention of Honor for Undergraduate Research, Universidad de Medellin, 1994

Research and Teaching Interests

Multihazard protective systems, AI for infrastructure solutions, seismic isolation and energy dissipation systems, computational mechanics, large-scale testing, structural health monitoring, structural systems for electrical infrastructure, and simplified procedures for structural engineering practice.

Selected Teaching Experience

Undergraduate Courses: Reinforced Concrete, Structures I, Structures II, Steel Design, Undergraduate Research, Introduction to Structural Protective Systems.
Graduate Courses: Introduction to Structural Protective Systems, Finite Element Analysis, Structures Project Research I, Structures Project Research II, Special Topics in Structures.

Leadership Experience

National
Interim Director University Transportation Centers REPS at Howard University,
Associate Director, Tier 1 University Transportation Center, The Mineta Consortium for Equitable, Efficient, and Sustainable Transportation (MCEEST).
Associate Director, Diversity & Outreach, Tier 1 University Transportation Center, For Durable and Resilient Transportation Infrastructure, 2023 to Present.
NHERI Natural Hazards Research Summit, Organizing committee member, 2022 and 2024.
NHERI Lehigh External Advisory Council, 2022 to present

University
College of Engineering and Architecture (CEA) Dean Search Committee, 2019
Faculty Grievance Committee, elected 2019-2022
Faculty Advisor for Public Health Case Challenge, 2016
CEA Dean Search Committee, 2015
Middle States Periodic Review Report Taskforce, Research and Special Emphasis Team, 2014
HU STEM team member, Presidents' initiative for collaboration between Howard University and UMBC for STEM initiatives, 2014-2015

College
Chair, Executive Committee (Since January 1, 2024)
CEA APT Committee Chair, (Since January 1, 2025)
CEA APT Committee Member, 2020-2024
CEA APT Committee Associate Chair, 2017-2018
CEA APT Committee Member, 2016-2018
Internal Reviewer of CEA NSF CAREER proposals, 2017-2024
CEA Grievance Committee, 2017-2019
Faculty advisor for Gear Up to Puebla/Mexico, 2017
Search Committee, Chair of MEE, Fall 2016
Decanal Transition Committee, 2016
CETLA Fellow for the College of Engineering, Architecture and Computer Sciences, 2013-14

Department
APT Committee Chair, 2016-present
Faculty Advisor-Founder: ACI chapter, 2018 to present
Assistant Chair, Civil and Environmental Engineering Department. 2016-2017
Faculty Search Committee, 2016 to present
Grievance Departmental Committee, 2016 to present

Graduate School Grievance Committee, 2014 to present
Curriculum Departmental Committee Chair, 2012 to present
Founder and Faculty Advisor: Ambassador of Engineering Program, 2011 to present
Graduate Student Director, 2010 to present
Faculty Advisor of the ASCE Howard University Student Chapter, 2010-2012, 2016-2017, 2023 – present

Selected Funded Grants

Research and Education in Promoting Safety. **Principal Investigator**. Sponsored by U.S. Department of Transportation Tier-1 UTC Center. Amount: $3,250,000.00. Duration: March 2, 2023 - August 31, 2028

The Mineta Consortium for Equitable, Efficient, and Sustainable Transportation (MCEEST). Principal Investigator. Sponsored by U.S. Department of Transportation Tier-1 UTC Center. Amount: $1,000,000.00. Duration: March 2, 2023 - August 31, 2028

Sustainable Mobility and Accessibility Regional Transportation Equity Research Center. Principal Investigator. Sponsored by U.S. Department of Transportation Regional UTC Center. Amount: $1,500,000.00. Duration: March 1, 2023 - August 30, 2028

Dure-Transp. Principal Investigator. Sponsored by the U.S. Department of Transportation via The University of Texas Arlington. Amount: $1,1250.00- Duration: June 1, 2023 - May 31, 2028

Pilot Study: Noise and Indoor Air Quality Throughout Washington DC Communities. Co-Principal investigator: C. Marin. Sponsored by Bezos Earth Fund at Howard University. Amount: $180,000.00. Duration: July 1, 2022 - August 31, 2023

NSF Convergence Accelerator Track D: Intelligent Surveillance Platform for Damage Detection and Localization of Civil Infrastructure. Principal Investigator. Sponsored by the National Science Foundation. Amount: $914,467. Award Number: OIA 2040665. Duration: September 15, 2020 - May 31, 2022

A Materials Characterization and Testing System for Enhancing Transdisciplinary Research and Education at Howard University. Co-Principal Investigator. Sponsored by The Air Force Office of Scientific Research. Amount: $569,904. Duration: 2020–2021

NSF CAREER Passive Seismic Protective Systems for Nonstructural Systems and Components in Multistory Building. Principal Investigator. Sponsored by the National Science Foundation. Amount: $503,290 Award Number: CMMI 1150462. Duration: March 1, 2012 - February 28, 2019

NSF NEESR-CR Innovative Seismic Retrofits for Reinforced Concrete Buildings. Co-Principal Investigator. Sponsored by the National Science Foundation. Total Award: $1,197,055 (Subaward: $122,472). Award Number: CMMI 1041607. Duration: October 1, 2010 - March 31, 2015

NSF NEESR-CR Full-Scale Structural and Nonstructural Building System Performance during Earthquakes. Co-Principal Investigator. Sponsored by the National Science Foundation. Total Award: $1,296,250 (Subaward:
$201,065). Award Number: CMMI 0936505. Duration: October 1, 2009 - September 30, 2014

Acquisition of a Biaxial Test System to Advance Research, Education, and Training at Howard University. Co-Principal Investigator. Sponsored by the National Science Foundation. Total Amount:

$367,500. Award Number: CMMI 1229082. Duration: August 1, 2012 - July 31, 2013

Mini Wave Flume- Operation and Maintenance at Howard University. Project Director. Sponsored by the National Science Foundation through Purdue University. Amount: $77,137. Duration: October 1, 2010 - September 30, 2014

National Science Foundation Research Experience for Undergraduates (REU) Supplements. Amount:
$31,250 (Total, plus travel expenses). For the first three NSF awards mentioned above

Selected Journal Publications /Refereed Conference Papers

Refereed Journal Articles (Graduate Students)**

Marin-Artieda, C., & Pardo-Ramos, A**. (2024). "Energy dissipation enhancement of wire rope isolators." Results in Engineering, 22. [DOI](https://doi.org/10.1016/j.rineng.2024.102154)

Whiteman, M., **Marin-Artieda, C**., & Tezcan, J. (2024). "Convolutional neural network approach for vibration-based damage state prediction in a reinforced concrete building." Journal of Computing in Civil Engineering, 38(2). [DOI](https://doi.org/10.1061/JCCEE5.CPENG-5511)

Tezcan, J., & **Marin-Artieda, C**. (2023). "Acceleration-to-displacement conversion as a single time-domain convolution operation." Advances in Engineering Software, 185.
[DOI](https://doi.org/10.1016/j.advengsoft.2023.103526)

Pardo A**. and **Marin-Artieda, C**. (2023). "Effects of isolator modeling on the predicted responses of an HDR base-isolated building." Engineering Structures, 294.
[DOI](https://doi.org/10.1016/j.engstruct.2023.116743)

Walsh, K., **Marin-Artieda, C**., & McElroy, K**. (2023). "Adaptive Passive Seismic Isolation System for Mitigating the Acceleration Response of Floor-Mounted Equipment." Journal of Structural Engineering, ASCE 150(1). [DOI](https://doi.org/10.1061/JSENDH.STENG-12688)

Baru, C., Pozmantier, M., Altintas, I., Baek, S., Jonathan, J., Condon, L., & **Marin, C**. (2022). "Enabling A.I. innovation via data and model sharing: An overview of the NSF Convergence Accelerator Track D." A.I. Magazine, 43, 93–104. [DOI](https://doi.org/10.1002/aaai.12042) (Cited by 1)

Marin–Artieda, C. and Buitrago, D**. (2021). "Numerical predictions of observed failure modes on non-ductile reinforced concrete frames." Engineering Structures, 243.
[DOI](https://doi.org/10.1016/j.engstruct.2021.112568) (Cited by 1)

Tezcan, J., and **Marin–Artieda, C.** (2018). "Least-Square-Support-Vector-Machine-based approach to obtain displacement from measured acceleration." Advances in Engineering Software, 115, 357-362.
[DOI](https://doi.org/10.1016/j.advengsoft.2017.10.011) (Cited by 16)

Chen, M**., Pantoli, E**., Wang, X**., Astroza**, R., Ebrahimian**, H., Hutchinson, T., Conte, J., Restrepo, J., **Marin, C.**, Walsh, K., Bachman, R., Hoehler, M., Englekirk, R., Faghihi, M. (2016). "Full-scale structural and nonstructural building system performance during earthquakes: Part I – Specimen description, test protocol, and structural response." Earthquake Spectra, 32(2), 771-794.
[DOI](https://doi.org/10.1193/012414EQS016M) (Cited by 73)

Pantoli, E**., Chen, M**., Wang, X**., Astroza, R**., Ebrahimian, H**., Hutchinson, T., Conte, J., Restrepo, J., Marin, C., Walsh, K., Bachman, R., Hoehler, M., Englekirk, R., Faghihi, M. (2016). "Full-scale structural and nonstructural building system performance during earthquakes: Part II – NCS damage states." Earthquake Spectra, 32(2), 771-794. [DOI](https://doi.org/10.1193/012414EQS017M) (Cited by 39)

Anagnos, T., Lyman-Holt, A., **Marin-Artieda, C**., Momsen, E. (2014). "Impact of Engineering Ambassador Programs on Student Development." Journal of STEM Education: Innovations and Research, 15(3). (Cited by 31)

Marin-Artieda, C., Whittaker, A. (2010). "Theoretical Studies of the XY-Frictional Pendulum (XY-FP) Seismic Isolation Bearing for Bridges." Journal of Bridge Engineering, ASCE, 15(6), 631-638. [DOI](https://doi.org/10.1061/(ASCE)BE.1943-5592.0000103) (Cited by 16)

Marin-Artieda, C., Whittaker, A., Constantinou, M. (2009). "Experimental Study of the XY-Frictional Pendulum (XY-FP) Bearing for Bridge Applications." Journal of Bridge Engineering, ASCE, 14(3), 193-202. [DOI](https://doi.org/10.1061/(ASCE)1084-0702(2009)14:3(193)) (Cited by 16)

Marin-Artieda, C., Dargush, G. (2007). "Approximate Limit Load Evaluation of Structural Frames Using Linear Elastic Analysis." Engineering Structures, Elsevier Science, 29, 296-304. [DOI](https://doi.org/10.1016/j.engstruct.2006.03.013) (Cited by 34)

Refereed Conference Proceedings (Undergraduate *, Graduate Students**)

Marin-Artieda, **C**., **Akpareva, O*.**, & Arhin, S. (2024, June 18). "Leveraging Computer Vision for Transportation Infrastructure Health Monitoring." ASCE International Conference on Transportation & Development (ICTD 2024). [DOI](https://ascelibrary.org/doi/book/10.1061/9780784485514), page 710

Marin, C., Alexander, Q., Tezcan, J., & Whiteman, M. (2023). "Towards an AI-Driven Platform for Damage Detection in Civil Infrastructure: Understanding Benefits and Stakeholder Needs." ASCE, pp. 416–434. [DOI](https://doi.org/10.1061/9780784484777.036)

Whiteman, M., Fernández-Cabán, P., **Marin, C**., Tezcan, J., and Cheng, Q. (2021). "Detection and classification of damages to civil infrastructure using a video-monitoring tool." 6th American Association for Wind Engineering Workshop, Clemson University, SC, May 2021. (Best Paper Presentation)

Walsh, K., Haftman, J**., and **Marin-Artieda C**. (2019). "Modeling and Validation of a Novel Variable Stiffness System for Seismic Isolation of Acceleration-Sensitive Equipment." Proceedings of the Structures Congress 2019, Orlando, Florida, April 24-27
[DOI](https://doi.org/10.1061/9780784482230.041)

Pardo, A.**, and **Marin-Artieda, C**. (2018). "Effects of Isolator Modeling on the Predicted Responses of an HDR Isolated System." Eleventh U.S. National Conference on Earthquake Engineering, June 25–29, Los Angeles, CA. (11NCEE Paper ID 833)

Buitrago, D.**, and **Marin Artieda, C**. (2018). "Application of a Validated Numerical Modeling Framework for the Prediction of Seismic Failure Mechanisms on Non-Ductile Reinforced Concrete Frames." Eleventh U.S. National Conference on Earthquake Engineering, June 25–29, Los Angeles, CA. (11NCEE Paper ID 695)

Marin-Artieda, C., and Han, X. (2017). "Energy Dissipation Platforms Based on Wire Rope Isolators

for the Seismic Protection of Equipment." 16th World Conference on Earthquake, 16WCEE 2017, Santiago Chile, January 9 to 13th. (Cited by 1)

Mosleh, M., and **Marin-Artieda, C**. (2017). "Impact of Engineering Ambassador Program on Academic Attainment of Minority Students in Engineering." 2017 ASEE Annual Conference & Exposition, Columbus, Ohio, June 25-28. [Link](https://peer.asee.org/28464)

Marin-Artieda, C., and Mosleh, M. (2016). "Stimulation of Scientific Interest and Higher Confidence through the Engineering Ambassador Programs Experience." Fall 2016 ASEE Mid-Atlantic Regional Conference, October 21-22, Hofstra University, Hempstead, NY

Marin-Artieda, C., and Han, X. (2015). "Experimental Developments in Isolation/Energy Dissipation Platforms for the Seismic Protection of Equipment in Multistory Facilities." Second ATC & SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, December 10–12, San Francisco, California, pp. 509-523. [DOI](https://doi.org/10.1061/9780784479728.042)

Marin-Artieda, C., and Han, X. (2015). "Base Isolation/Damping Platforms for Local Protection of Equipment at Floors of Fixed Base Buildings." JAEE Annual Conference and International Symposium on Earthquake Engineering, November 19-20, Tokyo, Japan

Marin-Artieda, C., and Han, X. (2015). "Experimental Investigation on the Seismic Performance of a Service Vibration Isolation Platform for Protection of Equipment." Structures Congress 2015, pp. 1774-1785. [DOI](https://doi.org/10.1061/9780784479117.153)

Han, X., and **Marin-Artieda, C.** (2015). "A Case Study on the Seismic Protection of Equipment Using Lead-Rubber Bearings." Structures Congress 2015, pp. 1962-1974.
[DOI](https://doi.org/10.1061/9780784479117.169)

Marin-Artieda, C. (2014). "Case Studies on the Assessment of Seismic Protective Systems for Equipment in Multistory Buildings." The 10th U.S. National Conference on Earthquake Engineering, Alaska, July 21-25, 2014. (Paper No. 1381)

Marin-Artieda, C., Kea, K.*, and Valencia, T*. (2014). "Studies of a Rooftop Cooling Tower and its Seismic Protective System." Structures Congress, Boston, MA, April 3-5.
[DOI](https://doi.org/10.1061/9780784413357.167)

Chen, M**., Espino, E**., Mintz, S**., Pantoli, E**., Wang, X**., Conte, J., Hutchinson, T., **Marin, C.**, Meacham, B., Restrepo, J., Walsh, K., Englekirk, R., Faghihi, M., Hoehler, M., McLaughlin, B. (2012). "Design and Construction of a Full-scale 5-story Base Isolated Building Outfitted with Nonstructural Components for Earthquake Testing at the UCSD-NEES Facility." Proceedings of 2012 Structures Congress and the 20th Analysis and Computation Specialty Conference, NB210. ASCE, March 29-31, 2012, Chicago, IL. [DOI](https://doi.org/10.1061/9780784412367.121) (Cited by 17)

Marin-Artieda, C., Lamichhane, S.*, and Charles, W.** (2012). "A Review of Dual-Hazard Effects on Bridge Superstructures and Their Protective Provisions." Proceedings of the 28th U.S.-Japan Bridge Engineering Workshop, Portland, Oregon, October 8-10.
[Link](https://www.pwri.go.jp/eng/ujnr/tc/g/pdf/28/28-7-3_Marin.pdf)

Lamichhane, S.*, and **Marin-Artieda, C.** (2012). "Survey of Bridges and their Damage Mitigation Provision in Recent Tsunamis." 91st TRB Annual meeting, 2012.
[Link](https://trid.trb.org/view/1130073)

Invitation-Only Presentations and Participation in International Workshops

Marin-Artieda, C. (2024). Lightning talk "Enhancing Infrastructure Condition Assessment through Computer Vision." Natural Hazards Research Summit 2024, Natural Hazards Research/NSF, University of Maryland, College Park, MD, United States. (May 14, 2024)

Marin-Artieda, C. (2023). "Leveraging Computer Vision for Transportation Infrastructure Health Monitoring." The Center for Durable and Resilient Transportation Infrastructure (DuRe-Transp) Webinar, December 12, 2023

Marin-Artieda, C. (2022). "Keynote Panelist at Purdue Engineering's Trailblazers in Engineering." Purdue University, West Lafayette, IN, United States. (July 27, 2022)

Marin-Artieda, C. (2022). "Towards an AI-driven Platform for Damage Detection in Civil Infrastructure-A Project Overview." Purdue Seminar, Purdue University, West Lafayette, IN. (March 22, 2022)

Marin-Artieda, C. (2022). "Establishing New Data Science Research, Education, and Partnerships." Panel Title at BEYA Conference. (February 17, 2022)

Marin-Artieda, C. (2021). "Infrastructure Safety Monitoring." NSF Convergence Accelerator Expo 2021, NSF, Washington. (July 27, 2021)

Marin-Artieda, C. (2021). "New Technologies to Estimate Infrastructure Conditions." Keynote speaker at the UPAEP-Colloquium: Ingenieria Sísmica, April 14, Puebla, Mexico

Marin-Artieda, C. (2019). "Advancing knowledge on protective systems towards seismic and tsunami resilience." NSF-sponsored Pacific Rim Earthquake Engineering Mitigation Protective Technologies International Virtual Environment (PREEMPTIVE). Advanced Studies Institute (ASI) in Thailand, Bangkok, June 5

Marin-Artieda, C. (2019). "Participation in NSF-sponsored International Workshop to Develop Research Campaigns, Interdisciplinary Teams, and Disruptive Technologies for the NHERI Five-Year Science Plan for Natural Hazards." Virginia, March 18-19, 2019

Marin-Artieda, C. (2017). "Improving seismic resiliency of buildings and their contents using passive systems. A research overview." Keynote speaker at the UPAEP-Colloquium: Ingeniería Sísmica, June 15, Puebla, Mexico

Marin-Artieda, C. (2017). Participation in the Third International NSF-sponsored Pacific Rim Earthquake Engineering Mitigation Protective Technologies International Virtual Environment (PREEMPTIVE) SAVI Workshop to Promote Seismic Protective Systems for Civil Structures. January 7 and 8, Santiago, Chile

Marin-Artieda, C. (2015). Participation in the first International NSF-sponsored Pacific Rim Earthquake Engineering Mitigation Protective Technologies International Virtual Environment (PREEMPTIVE) Workshop "The performance of seismic protective systems during the 2011 Tohoku Earthquake." November 2015, Tokyo, Japan

Marin-Artieda, C. (2015). Participation in NSF-sponsored International Workshop at the European Laboratory for Structural Assessment (ELSA), in Ispra, Italy, to promote and develop new collaborative

research between U.S. and European counterparts in Real-Time Hybrid Simulation (RTHS). October 5-6

Marin-Artieda, C. (2014). Participation in the 5th Workshop on China-USA Collaboration for Disaster Evolution/Resilience of Civil Infrastructure and Urban Environment, organized to establish partnerships for improving disaster resilience. July 25, Anchorage, Alaska

Marin-Artieda, C., Lamichhane, S., and Charles, W. (2012). "A Review of Dual-Hazard Effects on Bridge Superstructures and Their Protective Provisions." 28th U.S.-Japan Bridge Engineering Workshop, October 8-10, Portland, Oregon. [Link](https://www.pwri.go.jp/eng/ujnr/tc/g/pdf/28/28-7-3_Marin.pdf)

Marin-Artieda, C. (2011). "Project Overview: Full-Scale Structural and Nonstructural Building System Performance during Earthquakes." NEES-TIPS Workshop at E-Defense, August 2011, Japan.

Refereed Conference Presentations (Undergraduate*, Graduate Students**)

Ruona Akpareva*, William Hawkins*, and Suprabhat Rijal*. (2024). "Enhancing Infrastructure Integrity Assessment through Interdisciplinary Research in Structural Health Monitoring." Research Week at Howard University, April 25, 2023

Ehiribe, C*., Khiri, Y*., Gautan, A*., Whiteman, M., **Marin, C.** (2021). "Spatio-temporal video analysis damage detection." Presented at Spatial Data Science for a Sustainable Future, June 2, 2021

Tezcan, J., Cheng, Q., and **Marin, C**. (2021). "A Deep-Learning Approach to Vibration-Based Damage Detection." Presented at the 2021 EERI Annual Meeting, March 22-25

Ghasemi, H**., and **Marin-Artieda, C**. (2018). "Validated Nonlinear Finite Element Analysis of Wire Rope Isolators under Dynamic Excitations." Paper Number IMECE2018-89381. Presented at the 2018 ASME IMECE Track 15 NSF Student Poster Competition Travel Award, November 9-15, Pittsburgh, PA

Buitrago, D**., **Marin-Artieda, C**. (2017). "Experimentally Validated Numerical Predictions of Seismic Failure Mechanisms on Non-Ductile Reinforced Concrete Frames." Presented at the Earthquake Engineering Research Institute (EERI) 69th Annual Meeting in Portland, OR, March 8, 2017. (Abstracts 695)

Charles, W**., **Marin-Artieda, C. (**2013). "Performance of Bridge Superstructure Restrainer Systems Under Multihazard Effects." Paper Number: 13-5382. Presented at the 92nd TRB Annual Meeting, 2013. [Link](https://trid.trb.org/view/1243114)

Marin-Artieda, C. (2012). "Performance Assessment of Seismic Protective Systems for Sensitive Equipment in Multistory Buildings." Presented at the ASCE 2012 Structures Congress, Chicago, IL, March 29-31, 2012. (Section Track: Non-building structures. Design, Analysis, and testing of nonstructural components. NB214)

Marin-Artieda, C., Lamichhane, S*. (2012). "Assessment of Earthquake-Tsunami Mitigation Technologies of Bridges." Presented at the ASCE 2012 Structures Congress, Chicago, IL, March 29-31, 2012. (Section Track: Bridge research and implementation: Seismic effects. BR1142012)

E. Conference Presentations (Undergraduate, Graduate Students**)*

Jones, B. and **Marin, C. (**2023). "CyBR-MSI: IRR CoP: Faculty perspective." Presented at the NSF online seminar, Washington, DC, United States, May 19, 2023

Ehiribe, C*., Khiri, Y*., Whiteman, M., Gautam, A*., **Marin, C. (**2021). "Spatio-temporal video analysis damage detection." Presented at the spatial@ucsb.global2021: Spatial Data Science for a Sustainable Future, Center for Spatial Studies, University of California, Santa Barbara, June 2, 2021

Ghasemi, H**., and **Marin-Artieda, C.** (2019). "Validated Numerical Modeling of Wire Rope Isolators under Dynamic Excitations: Nonlinear Finite Element Analysis." Presented at Howard University Research Week, April 12, 2019

Wallace, C*., McCauley, K*., and **Marin-Artieda, C.** (2019). "Investigating The Dynamic Properties of Computer Server Frames Using Experimental and Numerical Analysis." Presented at Howard University Research Week, April 12, 2019

Pardo, A.**, and **Marin-Artieda, C**. (2018). "Enhancing energy dissipation capacity of wire rope isolators." Presented at Howard University Research Week, 2018

Dahal, L*., Famakin, S**., **Marin-Artieda, C**., and Kim, C. (2018). "Magnetic Levitation System to Achieve Ideal Seismic Isolation." Presented at Howard University Research Week, 2018

Famakin, S**., **Marin-Artieda, C.,** and Kim, C. (2018). "Investigating Seismic Energy Harvesting for Mitigation of Seismic Effects on Equipment." Presented at Howard University Research Week, 2018.
Pardo, A**., and Marin-Artieda, C. (2017). "Validation and Verification of Bidirectional Seismic Analysis of a High Damping Rubber Isolation System." Presented at Howard University Research Week, 2017

Poster Presentations (Undergraduate*, Graduate Students)**

Bajracharya, D*., Chandran, P., and **Marin-Artieda, C.** (2018). "Numerical modeling for predicting failure mode in lattice transmission towers using nonlinear String of Continuous Beams (SOCB) formulation." Presented at Howard University Research Week, 2018

Al Jawhar, A**., **Marin-Artieda, C**. (2018). "Investigating Wire Rope Isolator for Seismic Protection of Floor-Mounted Equipment in a Low-Rise Hospital Building." Presented at Howard University Research Week, 2018

Asemota, A*., **Marin-Artieda, C.** (2018). "Experimental data analysis for determination of seismic energy dissipation of computer server frames." Presented at Howard University Research Week, 2018

Duverge-Carreno, A*., **Marin-Artieda, C.** (2016). "Exploring Different Configurations of Wire Ropes Supporting Slender Equipment to Minimize Rocking under Earthquake Shaking." Presented at the AAAs 2016 Annual Meeting, February 14, Washington, DC. (Won Honorable Mention at the 2016 AAAS Student Poster Competition in the Technology, Engineering, and Math category.)

Han, X., M**arin-Artieda, C.** (2016). "Seismic Protection of Equipment in Essential Multistory Buildings with Lead-Rubber Bearings." Presented at the AAAs 2016 Annual Meeting, February 14, Washington, DC

Asfaw, A**., **Marin-Artieda, C. (2016)**. "Experimental Study of the Seismic Behavior of Hinged-Rubber Bearing." Presented at the AAAs 2016 Annual Meeting, February 14, 2016, Washington, DC

Marin-Artieda, C., Jones, P*., Chin, S. (2014). "Impact of the Howard University Engineering Ambassador Program." Presented at the 10th U.S. National Conference on Earthquake Engineering,

Alaska, July 21-25, 2014

Charles, W**., **Marin-Artieda, C.** (2013). "Seismic Performance of Reinforced Concrete Structures Fitted with Shape Memory Alloys as Structural Recentering Devices." Presented at Quake Summit 2013, August 7, 2013, Reno, NV

Kea, K*., Valencia, T*., **Marin-Artieda, C.** (2013). "Seismic Performance of a Roof Cooling Tower and its Seismic Protective System." Presented at Quake Summit 2013, August 7, 2013, Reno, NV

Rolim, P*., **Marin-Artieda, C. (**2013). "Numerical and Experimental Studies on the Global Response of a Full-scale, Five-story Base Isolated Building under Earthquake Shaking." Presented at Quake Summit 2013, August 7, 2013, Reno, NV

Non-refereed Publications

Experimental Earthquake Testing Datasets

Marin-Artieda, Claudia, Han, Xing (2015). "Base isolated/damping platforms for seismic protection of essential equipment - Lead rubber bearing platform." Distributed by Network for Earthquake Engineering Simulation (NEES). [DOI: 10.4231/D3R20RX4S](https://doi.org/10.4231/D3R20RX4S)

Marin-Artieda, Claudia, Han, Xing, Asfaw, Amdebrhan (2015). "Base isolated/damping platforms for seismic protection of essential equipment - Hinge-Bearing Platform." Distributed by NEES. [DOI: 10.4231/D3M90240F](https://doi.org/10.4231/D3M90240F)

Marin-Artieda, Claudia, Han, Xing (2015). "Base isolated/damping platforms for seismic protection of essential equipment - Energy-absorbing platforms of wire ropes." Distributed by NEES. [DOI: 10.4231/D3GH9B97M](https://doi.org/10.4231/D3GH9B97M)

Marin-Artieda, Claudia, Han, Xing (2015). "Base isolated/damping platforms for seismic protection of essential equipment - Negative-Stiffness Vibration Isolation Platform." Distributed by NEES. [DOI: 10.4231/D3BV79W59](https://doi.org/10.4231/D3BV79W59)

Marin-Artieda, Claudia, Han, Xing (2015). "Base isolated/damping platforms for seismic protection of essential equipment - Pendulum-based Columns Platform." Distributed by NEES. [DOI: 10.4231/D3736M32C](https://doi.org/10.4231/D3736M32C)

General Articles

Hutchinson, T., Restrepo, J., Conte, J., Meacham, B., Walsh, K., **Marin, C.**, Bachman, R., Englekirk, R., Faghihi, M., Hoehler, M. (2012). "Earthquake and fire testing of a 5-story building fully outfitted with nonstructural components and systems." Go Structural, The seismic zone, September 2012

Marin-Artieda, C. (2012). "Improving Seismic Resiliency of Buildings and Their Contents." Howard Engineer, The Voice of Howard University Engineering, Fall 2012

Marin-Artieda, C., Whittaker, A., Constantinou, M. (2007). "Experimental and Analytical Study of the XY-Frictional Pendulum (XY-FP) Bearing for Bridge Applications." Technical Report MCEER-07-0009, MCEER, Buffalo, New York, 2007.

Selected Media Coverage

"Diverse Paths to Engineering from Medellín to Washington DC, Claudia Marin Blazes A Trail in Earthquake Engineering." NHERI Stories: Diverse Paths to Engineering, March 3, 2023. [Read more](https://www.designsafe-ci.org/community/news/2023/march/medellin-washington-dc-claudia-marin-blazes-trail-earthquake-eng/)

"**Smart Structural Health Monitoring." The NSF-funded Natural Hazards Engineering Research Infrastructure (NHERI),** January 16, 2023. [Read more](https://www.designsafe-ci.org/community/news/2023/january/smart-structural-health-monitoring/)

"Infrastructure Innovation." Howard Magazine, October 1, 2021. [Read more](https://magazine.howard.edu/stories/infrastructure-innovation)

"**Structural engineering alumna earns NSF grant to develop an intelligent platform for damage detection."** November 11, 2020. [Read more](https://engineering.buffalo.edu/civil-structural-environmental/news-events/latest_news.host.html/content/shared/engineering/civil-structural-environmental/articles/2020/11/structural-engineering-alumna-earns-nsf-grant-to-develop-intelligent-platform-for-damage-detection.detail.html)

"Delivering societal impact through quantum- and AI-driven data and modeling research." NSF News. [Read more](https://www.nsf.gov/news/special_reports/announcements/091720.02.jsp)

"UPAEP and Howard University in Washington D.C., work on seismic engineering projects." [Read more](https://www.dropbox.com/s/12iuzr5a1ugqy6e/UPAEP%20y%20la%20Universidad%20de%20Howard_translation.pdf?dl=0)

"Researchers Work to Shield Computers from Seismic Forces." ASCE-Magazine. [Read more](https://www.dropbox.com/s/elrwomrp2p9c72q/Researchers%20Work%20to%20Shield%20Computers%20From%20Seismic%20Forces%20_%20ASCE.pdf?dl=0)
"Shaky research." Yahoo Labs. [Read more](https://yahooresearch.tumblr.com/post/93437225281/shaky-research-yahoo-labs-contributes-to-new)

Selected Professional Service and Affiliations

Panelist, National Science Foundation Proposal Review Panel, 2009-2021
Reviewer of Technical papers for various engineering journals, 2009-present
Coordinator, Engineer's Week National Science Foundation (NSF), 2011-2017
Member, American Society of Civil Engineers
Member, Structural Engineers Institute of ASCE
Member, Earthquake Engineering Research Institute
Member, American Concrete Institute
Board of Directors, National Capital Chapter of American Concrete Institute, ACI, 2009-2012