

Félix L. Santiago Collazo, Ph.D., P.E.

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EDUCATION

Ph.D. Civil Engineering, Louisiana State University, 2021
M.S. Civil Engineering, University of Puerto Rico at Mayagüez, 2018
B.S. Civil Engineering, University of Puerto Rico at Mayagüez, 2016

PROFESSIONAL CERTIFICATION

PE Licensed Professional Engineer- Georgia Board, PE # 050724, 2023
PE Licensed Professional Engineer- Puerto Rico Board, PE # 27541, 2020
EIT Licensed Engineer in Training- Puerto Rico Board, EIT # 27541, 2016

PROFESSIONAL APPOINTMENTS

2023-Present Collaborator
Puerto Rico Water Resources and Environmental Research Institute
University of Puerto Rico at Mayagüez
2022-Present Assistant Professor of Resilient Infrastructure for Sustainability and Equity
School of Environmental, Civil, Agricultural, and Mechanical Engineering
University of Georgia
2021-2022 Research Scientist
Institute for Resilient Infrastructure Systems
University of Georgia
2021-2022 Research Scientist
Coastal Ocean Analysis and Simulation Team
University of Georgia

PUBLICATIONS

Refereed Journal Article

1. **F.L. Santiago-Collazo**, M.V. Bilskie, P. Bacopoulus, and S.C. Hagen (2021). “An Examination of Compound Flood Hazard Zones for Past, Present and Future Low-gradient Coastal Land-margins.” *Frontier in Climate*, 3:684035, doi: 10.3389/fclim.2021.684035.

2. A.J. Rabideau, K. Swensen, Z. Chen, **F.L. Santiago-Collazo**, C. Bronner, C. Lowry, R. Gnat, and T. Lockwood (2021). “Hydrologic Evaluation of a Poplar Phytoextraction System.” *International Journal of Phytoremediation*, doi: 10.1080/15226514.2021.1929824.
3. **F.L. Santiago-Collazo**, M.V. Bilskie, and S.C. Hagen (2019). “A Comprehensive Review of Compound Inundation Models in Low-Gradient Coastal Watersheds.” *Environmental Modelling and Software*, 119, 166-181, doi: 10.1016/j.envsoft.2019.06.002.
4. **F.L. Santiago-Collazo**, and W.F. Silva (2019). “Hydraulic Model for Channel Networks with Hydraulic Structures.” *Tecnología en Marcha*, 32 (7), 100-108, doi:10.18845/tm.v32i7.42.
5. **F.L. Santiago-Collazo**, and W.F. Silva-Araya (2019). “Computational Model for Gradually Varied Flow in Channel Networks with Hydraulic Structures.” *Journal of Irrigation and Drainage Engineering*, 145 (6), 1-13, doi:10.1061/(ASCE)IR.1943-4774.000138.
6. W.F. Silva-Araya, **F. L. Santiago-Collazo**, J. Gonzalez-Lopez, and J. MaldonadoMaldonado (2018). “Dynamic Modeling of Surface Runoff and Storm Surge during Hurricane and Tropical Storm Events.” *Hydrology*, 5 (13), 1-28, doi:10.3390/hydrology5010013.
7. **F.L. Santiago-Collazo**, W. Silva Araya, J. Gonzalez-Lopez, and J. Maldonado-Maldonado (2017). “Flooding Effects Combining Storm Surge and Surface Runoff during Hurricane Georges on the Eastern Coast of Puerto Rico.” *Revista Internacional de Desastres Naturales, Accidentes e Infraestructura Civil*, 17 (2), URL [https://www.scipedia.com/public/SantiagoCollazo_et_al_2017a].

Manuscript in Review and Preparation

1. **F.L. Santiago-Collazo**, M.V. Bilskie, P. Bacopoulus, and S.C. Hagen (2023). “Compound Inundation Modeling of a 1-D Idealized Coastal Watershed Using a Reduce-Physics Approach.” *Water Resources Research*, In Review.
2. **F.L. Santiago-Collazo**, and W.F. Silva-Araya. “Computation of Flow Profiles in Braided Rivers and Channel Networks.” *Journal of Hydraulic Engineering*, In preparation.

Conference Proceedings

1. M.V. Bilskie, **F.L. Santiago-Collazo**, S.C. Hagen, S. Gao, P. Bacopoulos, D. Resio, H. Zhao, J. Atkinson, and Z. Cobell (2021). “Coupling Hydrologic & Surge Processes To Examine Compound Flood Transition Zones.” US National Congress of Computational Mechanics, Chicago, IL, July 25-29.
2. S. Gao, M.V. Bilskie, S.C. Hagen, and **F.L. Santiago-Collazo** (2018). “Increasing Resilience to Current and Future Flooding Through the Integration of Hydrologic and Storm Surge Models.” American Geophysical Union Fall Meeting, Washington D.C., December 10-14.
3. **F.L. Santiago-Collazo**, A. Rabideau, and B. Ransom (2016). “Hydrologic Analysis of a Poplar-based Phytoremediation System.” Karst Groundwater Contamination and Public Health: Abstracts and field trip guidebook for the symposium held January 27-30, 2016, San Juan, Puerto Rico. Karst Waters Institute Special Publication 19, *Karst Waters Institute*, Leesburg, Virginia. 82 p.

Thesis/Dissertation

1. **F.L. Santiago-Collazo** (2021). "Simulation of Compound Flood Events in Low-Gradient Coastal Watersheds." Ph.D. Dissertation, Louisiana State University, Baton Rouge, LA.
2. **F.L. Santiago-Collazo** (2018). "Computation of Gradually Varied Flow in Channel Networks with Hydraulic Structures." M.S. Thesis, University of Puerto Rico, Mayaguez, PR.

Book Chapters

1. T. Wahl, R. Jane, **F.L. Santiago-Collazo**, A. Gori, K. Serafin "Compound hazards during tropical cyclones" in *Tropical Cyclones and Associated Impacts: A Global Perspective*. Elsevier, in preparation.

Engineering Design Studies / Reports

1. W.F. Silva, and **F.L. Santiago-Collazo**, "Storm Inundation Management for the Pozo Redondo Creek Watershed at the Lajas Arriba Community in Puerto Rico." Hydraulic-Hydrologic Engineering Study presented to Lajas Municipality in June 2018.
2. B. Bledsoe, C. Alexander, J. Gambill, **F. Santiago-Collazo**, J. Calabria, C. Landry, A. Smith, A. Vick, "Tybee Island Natural Infrastructure Master Plan". Final Report for the NFWF Tybee Island Coastal Marsh and Community Resilience Adaptation Project, January 2023.
3. R. Jones, **F. Santiago-Collazo**, K. Shostak, "American Society of Civil Engineering Report Card for Georgia-Stormwater Section, ASCE Georgia Chapter.

AWARDS & HONORS

- 2021 Most cited paper for review papers in Environmental Modeling & Software
- 2021 LSU Department of Civil and Environmental Engineering Graduate Presentation (2nd Place)
- 2019 Scholarship Recipient- ASCE COPRI Louisiana Chapter
- 2017 Fellowship Recipient, National Science Foundation- Graduate Research Fellowship Program
- 2015 Geological Society of America Best Undergraduate Poster in Hydrogeology (1st Place)
- 2014 Research Scholarship- Puerto Rico Louis Stokes Alliance for Minority Participation
- 2012 Scholarship Recipient- Boeing Scholarship
- 2011 Scholarship Recipient- Boeing Scholarship
- 2010 Scholarship Recipient- Boeing Scholarship

GRANTS

Funded

- 2024-2026 **Santiago-Collazo, F.L.**, Landry, C., Calabria, J., Shelton, J., Brown, J., Giovengo, K., National Fish and Wildlife Foundation- National Coastal Resilience Fund , “City of Tybee Island, GA Coastal Marsh and Community Resilience Adaptation - II,” Institution: City of Tybee Island, UGA subaward \$270,000 Role: Lead-PI.
- 2024-2026 Ferreira, S., **Santiago-Collazo, F.L.**, Frimpong, E., Balling, M., Brown, J., Andrews, K., Georgia Sea Grant, “Assessing the economic impact of compound risks in underserved communities: A Glynn County, GA, Case Study”, \$150,000. Role: Co-PI.
- 2023-2027 Fuller, C.H., **Santiago-Collazo, F.L.**, Helmrich, A., Gambill, J., “Resource for Assistance and Community Training – Region 4,” Lead Institution: Research Triangle Institute, UGA subaward \$922,345. Role: Senior Personnel.
- 2023-2026 **Santiago-Collazo, F.L.**, Tritinger, A., Everett, C., Engineering with Nature & Network for Engineering with Nature, “Towards Modeling Application: Integrating Coastal and Riverine Natural Infrastructure to Reduce Multi-Flood Hazards,” \$205,000. Role: Lead-PI.
- 2023-2025 **Santiago-Collazo, F.L.**, Jambeck, J.R., Prevented Ocean Plastic Research Centre, “Inland Litter Hydrodynamics: Characterizing the Litter Transport during Wet Weather Events in Communities,” \$250,000. Role: Lead-PI.
- 2023-2024 **Santiago-Collazo, F.L.**, Bilskie, M.V., Caribbean Coastal Ocean Observing System, “Mapping Compound Inundation along Puerto Rico’s Coastal Watersheds: A Practical Approach,” \$151,450. Role: Lead-PI.
- 2022-2023 Bilskie, M.V., Bledsoe, B.B., Alexander, C., Pippin, J.S., Jones, S., DiTommaso, E., **Santiago-Collazo, F.L.**, Chatham County - Savannah Metropolitan Planning Commission, “Flooding Dynamic Modeling for Optimized Planning of CORE MPO Transportation Infrastructure Systems,” \$151,319. Role Key Personnel.
- 2022-2023 **Santiago-Collazo, F.L.**, Gambill, J., City of Tybee Island Georgia, “Enhancing Tybee Island Green Infrastructure Master Plan,” \$35,000. Role: Lead-PI.
- 2022-2023 Capps, K., Abney, R., Gaur, N., Lipp, E., **Santiago-Collazo, F.L.**, Metropolitan North Georgia Water Planning District, “Wet Weather Septic Systems Impact to Water Quality,” 199,062. Role: Key Personnel.

Pending

- 2025-2030 **Santiago-Collazo, F.L.**, Bilskie, M., Woodson, C.B., Coleman, D., Knightes, C., U.S. National Institute of Health-Superfund Research Center, “Assessing hydrodynamic conditions of Superfunds contaminants within the Brunswick Peninsula,” Lead Institution: Emory University, UGA subaward \$1,076,562. Role: Project Lead.
- 2024-2029 **Santiago-Collazo, F.L.**, Ferreira, S., Bledsoe, B., J., Brown, J., Pippin, J.S., Carswell, B., Silva-Araya, W., Bilskie, M., ERDC Civil Works Collidor, “An Integrated Framework for Achieving Water Equity in Flood Risk Management Projects,” \$1,875,000 Role: Lead-PI.
- 2024-2027 Fuller, C., **Santiago-Collazo, F.L.**, Bridges, T., Jelks, N., Naumova, E., Perez, G., National Institute of Health- Exploratory Centers (P20), “Center for Resilience to Extreme Events: Community Vulnerability, Engagement, and Health Risk”, Lead Institution: Tuft University, UGA subaward: \$360,000 Role: Co-I.
- 2024-2028 **Santiago-Collazo, F.L.**, Munoz, D., Motte, T., National Science Foundation-Hydrologic Science Program, “A Hybrid Framework for Identifying Tropical Cyclone-Induced Compound Flood Hotspot Locations for Present and Future Conditions,” \$715,093
Role: Lead-PI.

Allocations

- 2020-2021 Hagen, S.C., M.V. Bilskie, J. Ikeda, **F. Santiago-Collazo**, Louisiana Optical Network Initiative (LONI), “Louisiana State University Center for Coastal Resiliency,” 750,000 CPU-hours on LONI Queenbee2.
- 2020-2021 Hagen, S.C., M.V. Bilskie, J. Ikeda, **F. Santiago-Collazo**, Louisiana State University High-Performance Computing, “Hurricane Storm Surge Modeling,” 1,00,000 CPUhours on SuperMIC.
- 2019-2021 Bilskie, M.V., S.C. Hagen, S.C. Medeiros, **F. Santiago-Collazo**, NSF XSEDE Research Allocation, “Tidal and hurricane storm surge modeling in the northern Gulf of Mexico”, 26,000 node-hours on TACC Stampede2 and 45 TB of storage on TACC Ranch.

*Information about unsuccessful proposals is provided upon request.

WORKSHOPS

- 2023 Comprehensive Water Risk Management Strategic Focus Area Workshop, U.S. Army Engineer Research and Development Center, Miami, FL, March 6-10.
- 2022 Creating a Sustainable Writing Practice Program, University of Georgia, Spring Semester.
- 2019 Envisioning risk of hurricane storm surge and sea-level rise, National Center for Atmospheric Research (NCAR), BRIGHT Workshop Series, NCAR Funded, Boulder, CO, July 16 –18.

INVITED TALKS

- 2023 Towards Assessing Compound Events in Latin America and the Caribbean. International Conference on Water Security for a Sustainable Future, Mexico City, Mexico, October 18-20.
- 2023 Coastal Flooding and Sea Level Rise. National Weather Service, San Juan, PR, September 19.
- 2023 Towards Total Water Level Assessments: Needs & Challenges. Southeast River Forecast Center, Peachtree City, Atlanta, June 15.
- 2023 Towards Total Water Level Assessments: Needs & Challenges in Caribbean Islands. Caribbean Coastal Ocean Observing System General Assembly, San Juan, PR, May 26.
- 2023 Multi-flood hazard modeling approaches and hybrid infrastructures solutions. Universidad Tecnológica de La Habana José A. Echevarría, La Habana, Cuba, March 10.
- 2022 Defining Flood Zone Transitions in Low-Gradient Coastal Regions. SFWMD-USACE Compound Flooding & Transition Zone Workshop, November 4.
- 2022 Coastal Hazard Risks and Approaches to Systems Level Resilience in the Southeastern US. Marine Corps Air Station Beaufort, July 22.
- 2022 Best Modeling Practices for Multi-Hazard Flood Assessments. ASCE Northeast Georgia Branch, June 30.
- 2022 Assessment of Hybrid Infrastructure Systems under Multi-Flood Hazards in Coastal Georgia. Network for Engineering With Nature Knowledge Series, March 9.
- 2021 Compound Inundation Modeling on a 1-D Idealized Coastal Watershed. Coastal Coupling Community of Practice, National Oceanic and Atmospheric Administration, August 18.
- 2021 A Multi-dimensional Analysis of Compound Flood at a Low-gradient Coastal Watershed. ASCE- Coasts, Oceans, Ports and Rivers Institute Student Chapter, Louisiana State University, March 29.
- 2020 Compound Flood: Louisiana vs. Puerto Rico. DHS-Coastal Resilience Center, University of Puerto Rico at Mayagüez, October 7.

CONFERENCE ACTIVITY

Presentations

- 2023 Assessing Coastal Flooding in Data-Scarce Regions: A Case Study for a Caribbean Island. 3rd International Workshop on Waves, Storm Surges, and Coastal Hazards Incorporating the 17th International Waves Workshop, Notre Dame, IN, October 2-6.
- 2023 Breaching the Gap in the Caribbean: A High-Resolution Hydrodynamic Model for Cuba. ADCIRC User Group Meeting, Baton Rouge, LA, June 8-9.
- 2023 Inland to Coastal Flooding and Everything in Between: A Perspective from Caribbean Islands. Association of State Floodplain Managers Annual Meeting, Raleigh, NC, May 7-12.
- 2023 Flood Inundation Study for Chatham County – Savannah Metropolitan Planning Commission. Georgia Water Resources Conference, Athens, GA, March 30-31, Co-presented with Matthew Bilskie.
- 2023 Modeling the service potential of nature-based solutions in stormwater management systems. Georgia Water Resources Conference, Athens, GA, March 30-31, Co-presented with Matthew Chambers.
- 2022 A Reduced-Physics Numerical Scheme for Compound Flood Hazard Assessments in Coastal Watersheds. American Geophysical Union Fall Meeting, Chicago, IL, December 12-16, Invited Speaker.
- 2022 Assessment of Hybrid Infrastructure Systems under Multi-Flood Hazards in Coastal Georgia. American Geophysical Union Frontiers in Hydrology Meeting, San Juan, PR, June 19-24.
- 2021 A Physics-Based Classification of Coastal Land-Margins based on Surface Flow. American Geophysical Union Fall Meeting, New Orleans, LA, December 13-17, Remote Participation.
- 2021 Coupling Hydrologic & Surge Processes to Examine Compound Flood Transition Zones. US National Congress of Computational Mechanics, Chicago, IL, July 25-29, Remote Participation, Co-presented with Matthew Bilskie.
- 2021 Simulation of Idealized Compound Flood Events in Low-gradient Coastal Watersheds. State of the Coast, New Orleans, LA, June 2-4, Remote Participation.
- 2021 Compound Inundation Modeling of a 1-D Idealized Coastal Watershed. CEE 9th Annual Graduate Student Research Conference, Baton Rouge, LA, March 26, Remote Participation.
- 2020 Compound Inundation Modeling of a 1-D Idealized Coastal Watershed. American Geophysical Union Fall Meeting, San Francisco, CA, December 1-17, Remote Participation.
- 2020 Simulation of Idealized Compound Flood Events in Low-Gradient Coastal Watersheds. ADCIRC User Group Meeting, March 30-31, Remote Participation.
- 2019 Compound Inundation Modeling of an Idealized Coastal Watersheds. American Geophysical Union Fall Meeting, San Francisco, CA, December 9-13.
- 2018 Compound Inundation Model in Low-Lying Coastal Watersheds. American Geophysical Union Fall Meeting, Washington D.C., December 10-14.
- 2018 Hydraulic Model for Channel Networks with Hydraulic Structures. XIII Latin American and Caribbean Congress of Agricultural Engineering, San José, Costa Rica, June 4-7, CoPresented with W.F. Silva-Araya.
- 2018 Storm Surge and Surface Runoff Modeling in Puerto Rico During Hurricane Georges. ADCIRC User Group Meeting, College Park, MD, April 9-13.

- 2017 Coastal and Inland Flooding Simulation for Resilience of Nearshore Infrastructure: Hurricane Georges in Eastern Puerto Rico. Lessons Learned and Best Practices: Resilience of Coastal Infrastructure, San Juan, PR, March 8-9, Co-Presented with W.F. Silva-Araya.
- 2016 Combined Flooding Effects from Storm Surge and Surface Runoff during Hurricane Georges on the Eastern Coast of Puerto Rico. Marine Science Research and Management Symposium, Mayagüez, PR, September 20.
- 2016 Hydrologic Analysis of a Poplar-based Phytoremediation System. Karst Water Institute Annual Meeting, San Juan, PR, January 27-31.
- 2015 Hydrologic Analysis of a Poplar-based Phytoremediation System. Geological Society of America Annual Meeting, Baltimore, MD, November 1-4.
- 2015 Hydrologic Analysis of a Poplar-based Phytoremediation System. AGMUS Research Symposium, San Juan, PR, August 29.
- 2015 Computation of Gradually Varied Flow in a Channel System. 50th Puerto Rico Interdisciplinary Scientific Meeting, San Juan, PR, March 14.
- 2014 Evaluation and Optimization of the Random Forest Algorithm for Crater Analysis. AGMUS Research Symposium, San Juan, PR, August 30.

Sessions Organized

- 2023 Multi-Hazard Flood Modeling: From Inland to Coast. Georgia Water Resources Conference, Athens, GA, March 30-31, Primary Convener.
- 2022 Multi-Hazard Flood Modeling: From Inland to Coast. American Geophysical Union Fall Meeting, Chicago, IL, December 12-16, Primary Convener.
- 2022 Multi-Hazard Flood Modeling: From Inland to Coast. American Geophysical Union Frontiers in Hydrology Meeting, San Juan, PR, 19-24 June, Primary Convener.

TEACHING EXPERIENCE

University of Georgia, 2021-present

- Undergraduate Course, Guest Lecture- Journalism Capstone (Fall 2023)
- Undergraduate Course, Instructor of Record – First-Year Odyssey Seminar (Spring 2023, Fall 2023)
- Graduate Course, Guest Lecture- Hydrometeorology (Fall 2022)
- Graduate Course, Guest Lecture- BioEngineering Seminar (Fall 2022)
- Undergraduate/Graduate Course, Instructor of Record - Open Channel Hydraulics (Fall 2022, Fall 2023)
- Undergraduate Course, Co-Instructor - Natural Resources Engineering (Spring 2022)
- Graduate Course, Guest Lecture- Computational Fluid Dynamics (Fall 2021)
- Undergraduate Course, Guest Lecture- The Coastal Impacts of Climate Change (Fall 2021)

Louisiana State University, 2019-2020

- Graduate Course, Co-Instructor- Tides, Surges, and Relative Sea-Levels (Fall 2020)

Graduate Course, Guest Lecture- Tides, Surges, and Relative Sea-Levels (Fall 2019) Graduate Course, Guest Lecture- Design of Hydrologic Systems (Spring 2021)

University of Puerto Rico at Mayagüez, 2016-2017

Graduate Course, Teaching Assistant - Introduction to Hydraulics (Fall 2017) Graduate Course, Guest Lecture- Introduction to Hydrology (Fall 2016)

RESEARCH EXPERIENCE

Graduate Research Assistant

- 2018-2021 Louisiana State University- Center for Coastal Resiliency (Baton Rouge, LA). Determine the flood transition zones due to extreme climatologic events for different periods of Louisiana's coastal landscape.
- 2014-2017 Puerto Rico Water Resource and Environmental Research Institute (Mayagüez, PR). Develop a hydrologic study to determine the surface runoff produced by Hurricane Georges (1998) and compute the total flood caused by the surface runoff and the storm surge.

Summer Research Intern

- 2017 Caribbean Coastal Ocean Observing System (Mayagüez, PR). Perform improvements to the ADCIRC model mesh for the Puerto Rico and US Virgin Islands on the north coast of Puerto Rico for a higher resolution bathymetry.
- 2016 University of Central Florida- CHAMPS Lab (Orlando, FL) & Louisiana State University- Center for Coastal Resiliency (Baton Rouge, LA). Modify advanced circulation models, including specification of wind forcing, advanced mesh development, and output processing to graphs and imagery.
- 2015 University at Buffalo-Ecosystem Restoration through Interdisciplinary Exchange (Buffalo, NY). Evaluate the hydrologic performance of a poplar-based system for containing impacted groundwater that was conducted over five years at the Ischua Creek Habitat site in Machias, NY.
- 2014 U.S. Army Corps of Engineers- Engineer Research and Development Center (Vicksburg, MS). Evaluate various weapon signatures against the soil or armored targets to provide a better post-attack assessment of the actual threat.

STUDENT SUPERVISION

University of Georgia

2024 – Present Mackenzie Hulse (Undergraduate Research Assistant)

2024 – Present Austin Ramirez (Undergraduate Research Assistant)
 2024 – Present Madison Ross (Undergraduate Research Assistant)
 2023 – Present Erin Gavin (Undergraduate Research Assistant)
 2023 – Present Marco Garcia (Ph.D. Student)
 2023 – Present Luciana Tarcha (Ph.D. Student)
 2023 – Present Orlando Vilorio Marimon (Ph.D. Student)
 2023 – Present Nazife Oruc Baci (Ph.D. Student)
 2023 – Present Logan Bayer (M.S. Student)
 2023 – Present Stevens Charles (M.S. Student)
 2023 – Present Dennis Granados Duran (M.S. Student)
 2022 – Present Alejandra Gomez (M.S. Student, Co-Advisor)
 2022 – Present Jack Robider (Undergraduate Research Assistant)
 2022 – Present Sara Mallon (Undergraduate Research Assistant)
 2022 – 2023 Hannah Lim (Undergraduate Research Assistant)
 2022 – 2023 Bob Deng (Undergraduate Research Assistant)
 2022 – 2023 Katherine Winter (Undergraduate Research Assistant)
 2022 Elena Matarrazo (Undergraduate Research Assistant)

University of Georgia’s Young Scholars Internship Program

2023 Samuel Cox, Madison County High School

Student Awards/Honors

2023 Sara Mallon, Center for Undergraduate Research Opportunities Fellowship (Spring, Summer and Fall)
 2023 Bob Deng, Center for Undergraduate Research Opportunities Fellowship (Fall)
 2023 Erin Gavin, Center for Undergraduate Research Opportunities Fellowship (Fall)
 2023 Haley Selsor, Best Student Poster Award in the Georgia Climate Conference
 2022 Hannah Lim, Center for Undergraduate Research Opportunities Fellowship (Fall)

SERVICE

To Profession

Journal Editor

2023 – Present Environmental Engineering Subject Editor, American Journal of Undergraduate Research

Technical Review

2022 - Present Technical Advisor, UNESCO’s Division of Water Sciences for Latin America & Caribbean

Proposal Review

2022, 2023 Reviewer, National Science Foundation

Journal Referee

AGU *Earths' Future*

AGU *Water Resources Research*

AGU *Geophysical Research Letters*

Elsevier *Journal of Hydrology*, Elsevier *Weather and Extremes*

Elsevier *Journal of Hydro-environment Research*

Elsevier *Journal of Environmental Modelling & Software*

Elsevier *Computer Methods in Applied Mechanics and Engineering*

EGU *Natural Hazards and Earth Systems Sciences*

EGU *EGUsphere*

Springer *Environmental Processes*

Springer *Natural Hazards*

Springer *Estuaries and Coasts*

To University of Georgia

Led several International Cooperative Agreements between UGA and the following institutions: Universidad Autonoma de Queretaro (Mexico), Centro Universitario Jose Antonio Echevarria (Cuba), Norwegian University of Life Sciences (Norway), Polytechnic University of Puerto Rico, University of Puerto Rico at Mayaguez, 2023
Diversity, Equity, and Inclusion Committee Member for the School of Environmental, Civil, Agricultural, and Mechanical Engineering, 2023-present
Engineering Academic Boot Camp- Instructor of Algorithm Class, 2023
River Basin Center- Engineering Advisory Board Member, 2023-present
Latin American and Caribbean Studies Institute - Core Faculty, 2022-present
Institute for Resilient Infrastructure Systems- Affiliated Faculty, 2022-present
Clean Water Science Network Program- Mentor for Latin American students, 2021-2022
UGA Mentor Program- Mentor for undergraduate students, 2021-2022

To Louisiana State University

Clean Water Science Network Program- Mentor for Latin American students in water-related areas, 2020-2021
LSU Genesis Mentoring Program- Mentor for Minority STEM 1st year students, 2019-2021
ASCE COPRI LSU Graduate Student Chapter- President, 2019-2021

To University of Puerto Rico at Mayagüez

PR Water & Environment Association UPRM Chapter- Outreach Manager, 2015-2017

NSPE UPRM Chapter- Manager Mentoring Program, 2013-2104
ASCE UPRM Chapter- Steel Bridge Team Member, 2013-2014

RELATED PROFESSIONAL SKILLS

Training

2018 LONI Scientific Computing Boot Camp
2018 ADCIRC Boot Camp, Seahorse Coastal Consulting and Aquaveo, LLC

NON-ACADEMIC WORK

2017-Present Land Ocean River Engineering- Consulting Engineer. Self-Employed
2008-2018 Head Coach- Sabana Grande Soccer Club.

LANGUAGES

Spanish- fluent
English- proficient

PROFESSIONAL MEMBERSHIPS & SOCIETY AFFILIATIONS

2022-Present American Society for Engineering Education
2018-Present American Geophysical Union
2011-Present American Society of Civil Engineers

REFERENCES

Available upon request.