

Priscila B. R. Alves, Ph.D., M.S.

Curriculum Vitae

Notarization. I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Signature *Priscila Barros Ramalho Alves*

Date: 09/05/2025

I. Personal Information

Full name: Priscila Barros Ramalho Alves

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Address:

Urban Studies & Planning Program
School of Architecture, Planning, and Preservation
The University of Maryland
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Academic appointments at UMD

- | | |
|----------------|--|
| 2025 – present | Assistant Research Professor in Urban Studies & Planning, School of Architecture, Planning, & Preservation, University of Maryland, College Park, MD |
| 2024 – 2025 | Lecturer, Urban Studies and Planning Program, School of Architecture, Planning and Preservation, University of Maryland, College Park, MD |
| 2024 – 2024 | Lecturer, Environmental Science & Technology, College of Agriculture and Natural Resources, University of Maryland, College Park, MD |
| 2022 – present | Manager, Stormwater, Infrastructure, Resilience and Justice (SIRJ) Lab. School of Architecture, Planning, & Preservation, University of Maryland, College Park, MD |
| 2022 – 2025 | Postdoctoral Research Associate, Stormwater, Infrastructure, Resilience and Justice (SIRJ) Lab. School of Architecture, Planning, & Preservation, University of Maryland, College Park, MD |

Other Employment

- | | |
|---------------|--|
| 2025- present | Faculty Affiliate, Civil and Environmental Engineering Program (PPGECA), University of Campina Grande, Brazil |
| 2021 - 2022 | Postdoctoral Research Associate, Centre for Water Systems – Engineering at the University of Exeter, United Kingdom. |

2021 - 2021	Civil Engineer, Municipal Sanitation Plan, University of Campina Grande, Brazil
2017 - 2022	Research Associate, Centre for Water Systems – Engineering at the University of Exeter, United Kingdom.
2014 - 2016	Lecturer, SENAI and Integrated Faculty of Patos (FIP), Campina Grande, Brazil
2013 – 2017	Research Associate, Civil and Environmental Engineering Program at the University of Campina Grande, Brazil.
2012 - 2012	Exchange Undergraduate Researcher, College of Engineering at the University of New Mexico, United States.

Educational Background

2017 - 2021	PhD in Water Engineering Dissertation: “A risk-based spatial-participatory framework for flooding mitigation in the semiarid region of Brazil”. Centre for Water Systems (CWS), University of Exeter – United Kingdom Chair(s): Dr. Slobodan Djordjevic and Dr. Akbar Javadi
2015 - 2017	MS in Civil and Environmental Engineering Thesis: “Simulations of drainage mitigation strategies: Proposals in two urban sub-catchments”. Civil and Environmental Engineering Program (PPGECA), University of Campina Grande (UFCG) – Brazil Chair(s): Dr. Iana Rufino and Dr. Patrícia Feitosa
2015 – 2017	Health and Safety Engineering Thesis: “Risk control practices and mitigation proposals for the Bakery Industry”. Integrated Faculty of Patos (FIP) – Brazil Chair: Dr. Mariana Gurjão
2010 – 2015	BS in Civil Engineering Bachelor of Science (2010-2015) University of Campina Grande (UFCG) – Brazil

Professional Certifications, Licenses, and Memberships

2025–present	International Association for Hydro-Environment Engineering and Research (IAHR)
2025–present	Brazilian Water Resources Association (ABRH)
2022- present	Association of Collegiate Schools of Planning
2022–present	Color of Water: Elevating Underrepresented Voices to Change the Narrative around Water
2015-present	Engineering and Architecture Brazilian Association (CREA)

II. Research, Scholarly, Creative and Professional Activities

Articles in Refereed Journals – *in chronological order:*

Published

- 2025 G. S. O. Lobão, H. C. Brito, M. D. A. V. Ribeiro, **P. B. R. Alves**, I. A. A. Rufino. Water security evaluation in small-sized cities in Paraíba, Brazil. *Water Supply* 2025; ws2025067. doi: <https://doi.org/10.2166/ws.2025.067>
- 2025 Goode, M., Abu, J. J., **Alves, P. B. R.**, Healey, E. M., Levell-Young, T., Smith-Hams, T., Volpitta, A., Crews, R., Brown, M., Rosenberg- Goldstein, R., Hendricks, M. D. A Peek at Leaks and Basement Backups: A Pilot Survey Exploring the Impacts and Outcomes of Untreated Sewage in Homes. *Environ. Res. Commun.* 7 045025. <https://doi.org/10.1088/2515-7620/adcb06>
- 2025 Qian Yao Si; **Priscila B. R. Alves**; Mitchel A. Pavao-Zucherman; Allen P. Davis; Tara Burke; Elizabeth M. Bonsignore; Jason Baer; Jen Cotting; Kaitlyn Peterson; Pierre Gaunard; Tamara Clegg; David Loshin; Andrew Fellows; Taylor Keen; Gerrit-Jan Knaap; Marccus D. Hendricks. "Internet of Things-Based Framework Application at a University Campus Scale: Linking Smart Monitoring Systems and Stormwater Management". *Advanced Intelligent Discovery*, 2025; 0:e2400027 <https://doi.org/10.1002/aidi.202400027>
- 2025 Healey, E. M., Anderson-Coughlin, B., **Alves, P. B. R.**, Levell-Young, T., Smith-Hams, T., Volpitta, A., Crews, R., Brown, M., Hendricks, M., D., Rosenberg- Goldstein, R. Antibiotic-resistant bacteria detected in homes impacted by sewage. *PLOS Water* 4(6): e0000375. <https://doi.org/10.1371/journal.pwat.0000375>
- 2024 **Alves, P. B. R.**; Amanguah, E., McNally, D., Maria, E., Ghaedi, H., Reilly, A. C, Hendricks, M. D. Navigating the Definition of Urban Flooding: A Conceptual and Systematic Review of the Literature. *Water Science and Technology* (2024); wst2024351. doi: <https://doi.org/10.2166/wst.2024.351>
- 2024 Jones, A., **Alves, P. B. R.**, Drakeford, B. and Hendricks, M. D. Slow violence to disasters: Exploring racialized topographies and contextualizing social vulnerability to flood and other environmental risks. *International Journal of Disaster Risk Reduction* (2024) <https://doi.org/10.1016/j.ijdrr.2024.104409>
- 2024 Si, Q., Brito, H.C., **Alves, P. B. R.**, Pavao-Zuckerman, M. A., Rufino, I. A. A., Hendricks, D. M. GIS-based spatial approaches to refining urban catchment delineation that integrate stormwater network infrastructure. *Discover Water*, 4, 24 (2024). <https://doi.org/10.1007/s43832-024-00083-z>
- 2024 Park, M., **Alves, P. B. R.**, Whiteheart, R., Hendricks, D. M. "Socially vulnerable people and stormwater infrastructure: A geospatial exploration of the equitable distribution of gray and green infrastructure in Washington D.C. Cities (2024) <https://doi.org/10.1016/j.cities.2024.105010>
- 2023 **Priscila B. R. Alves**, Ho Huu Loc, Yenushi De Silva, Jessica Penny, Slobodan Djordjevic and Mukand Babel. (2023) The Dual-Risks Context: A Systematic Literature Review for the Integrated Management of Flood and Drought Risks. *International Journal of Disaster Risk Reduction*. <https://doi.org/10.1016/j.ijdrr.2023.103905>
- 2023 Penny, Jessica; Khadka, Dibesh; Babel, Mukand; **Alves, Priscila**; Djordjević, Slobodan; Chen, Albert S.; Djordjević, Slobodan and Loc, Ho Huu. Integrated assessment of flood and drought hazards for current and future climate in a tributary of the Mekong River basin. *Journal of Water and Climate Change* 2023; jwc2023252. doi: <https://doi.org/10.2166/wcc.2023.252>
- 2023 Jess Penny; Dibesh Khadka; **Priscila B. R. Alves**; Albert. S. Chen; Sangan Shresta; Slobodan Djordjević. (2023) "Using Multi Criteria Decision Analysis in a Geographical Information System framework to assess Drought Risk." *Water Research X Journal*. <https://doi.org/10.1016/j.wroa.2023.100190>
- 2023 Jess Penny; **Priscila B. R. Alves**; Yenushi De Silva; Albert. S. Chen; Sangan Shresta; Slobodan Djordjević. (2023) "Analysis of Potential Nature-Based Solutions for the Mun River Basin, Thailand". *Water Science & Technology*. <https://doi.org/10.2166/wst.2023.050>

- 2023 Carla Carvalho; Iana Rufino; Higor Brito; **Priscila B. R. Alves**. (2023) "Compound extreme events related to water and coping capacity: a spatial analysis in Campina Grande/PB". Revista Geotemas.
- 2022 **Priscila B. R. Alves**, Slobodan Djordjevic and Akbar Javadi. (2022) Understanding the NEEDS for ACTING: An integrated framework for applying Nature-Based Solutions (NBS) in Brazil. Water Science and Technology, v. 85, p. 987-1010. <https://doi.org/10.2166/wst.2021.513>
- 2022 **Priscila B. R. Alves**, Slobodan Djordjevic and Akbar Javadi. (2022). Addressing social and institutional vulnerabilities in the context of flood risk mitigation. Journal of Flood Risk Management, e12839. <https://doi.org/10.1111/jfr3.12839>
- 2021 **Priscila B. R. Alves**, Slobodan Djordjevic and Akbar Javadi. (2021) An integrated socio-environmental framework for mapping hazard-specific vulnerability and exposure in urban areas, Urban Water Journal, DOI: [10.1080/1573062X.2021.1913505](https://doi.org/10.1080/1573062X.2021.1913505)
- 2021 Iana Rufino, Slobodan Djordjević, Higor Brito, **Priscila B. R. Alves**. (2021) Multi-Temporal Built-Up Grids of Brazilian Cities: How Trends and Dynamic Modelling Could Help on Resilience Challenges?, Sustainability, volume 13, no. 2, pages 748-748, [DOI:10.3390/su13020748](https://doi.org/10.3390/su13020748).
- 2020 **Priscila B. R. Alves**, Maria Cordão, Slobodan Djordjevic and Akbar Javadi (2020) Place-Based Citizen Science for Assessing Risk Perception and Coping Capacity of Households Affected by Multiple Hazards, Sustainability, volume 13, no. 1, pages 302-302, [DOI:10.3390/su13010302](https://doi.org/10.3390/su13010302).
- 2020 Maria Cordão, Iana Rufino, **Priscila B. R. Alves**, Filho, M. N. M. (2020) Water shortage risk mapping: a GIS-MCDA approach for a medium-sized city in the Brazilian semi-arid region, Urban Water Journal, volume 17, no. 7, pages 642-655, [DOI:10.1080/1573062x.2020.1804596](https://doi.org/10.1080/1573062x.2020.1804596)
- 2020 **Priscila B. R. Alves**, Iana Rufino, Patrícia Feitosa, Slobodan Djordjevic, Akbar Javadi (2020) Land-Use and Legislation-Based Methodology for the Implementation of Sustainable Drainage Systems in the Semi-Arid Region of Brazil, Sustainability, volume 12, no. 2, pages 661-661, [DOI:10.3390/su12020661](https://doi.org/10.3390/su12020661)
- 2018 **Priscila B. R. Alves**, Hiran Filho, Bárbara Tsuyuguchi, Iana Rufino, Patrícia Feitosa (2018) Mapping of Flood Susceptibility in Campina Grande - PB: A Spatial Multicriteria Approach, Boletim de Ciências Geodésicas, volume 24, no. 1, pages 28-43, [DOI:10.1590/s1982-21702018000100003](https://doi.org/10.1590/s1982-21702018000100003)

Under Review

1. **Alves, P. B. R.**, Goode, M., Healey, E. M., Levell-Young, T., Anderson-Coughlin, B., Smith-Hams, T., Volpitta. A., Crews, R., Brown, M., Rosenberg- Goldstein, R., Hendricks, M. D. Environmental and Community-Driven Methodology to Understand and Address Risks from Sanitary Sewer Overflows and Basement Backups. Journal of Water & Health (Submitted 2024).

In-progress

1. Brito, H. C.; **Alves, P. B. R.**; Hendricks, M.; Rufino, I. A. Gray and green areas in the built environment: Assessing urban flooding and LULC in Washington D.C.
2. Brito, H. C.; **Alves, P. B. R.**; Hendricks, M.; Rufino, I. A. How to mitigate urban flooding? The role of SUDS in promoting environmental justice in Washington D.C.
3. **Alves, P. B. R.**, Rufino, I., Djordjevic, S., Javadi, A. The context of Nature-Based Solutions in the Brazilian Context: A Systematic Analysis of the Literature.

Books Chapters

Published

- 2018 **ALVES, P. B. R.; SANTOS, K. A.; RUFINO, I. A. A.; FEITOSA, P. H. C.** Title: “Uso de medidas sustentáveis para mitigação de casos de inundações e alagamentos nas áreas urbanas: Estudo de Caso em Campina Grande – PB” (ENG: “Use of sustainable measures to mitigate cases of flooding and flooding in urban areas: Case Study in Campina Grande – PB”). In: Maria de Fátima Martins; Ana Cecília Feitosa Vasconcelos. (Org.). Sustentabilidade urbana: as cidades como espaço de qualidade de vida. 1ed.Campina Grande: Editora Leve, 2016, p. 14-42.

Conferences, Workshops and Talks

Invited talks and panels:

- 2025 ARISE – Community Engaged Research Roundtable, Title: “Linking social equity in community infrastructure resilience planning”. The University of Kansas, March 2025. Invited talk.
- 2024 Transforming Public Health: Voices of Women of Color in Leadership, University of Maryland School of Public Health, 2024. Invited panel.
- 2024 Communities, Climate Change, and Health Equity, Workshop Series: Exploring flood adaptation strategies to support health equity – Workshop, 2024. National Academies of Sciences, Engineering, and Medicine. Invited talk.
- 2023 Environmental Justice and You: Stormwater Management at the Mount Rainier Nature Center, 2023. Title: “Connections Between Environmental Justice, Climate Resilience, and Stormwater Management”. Invited talk.
- 2023 National Capital Region Water Resources Symposium, 2023, Title: “Equitable and Resilient Water Resources Management and Practices”. Talk and panel.
- 2023 GreenLatinos: Stormwater and Disaster Mitigation, 2023. Invited panel.
- 2023 Societal Big Challenges: Equitable Communities, School of Architecture, Planning and Preservation. University of Maryland, College Park. Title: “Combining Environmental Health Assessments with Infrastructure Planning and Participatory Research to Evaluate Risks from Sanitary Sewer Overflows and Basement Backups”. Invited talk.
- 2022 Maryland Water Monitoring Council – Annual Conference, 2022. Title: “Addressing Water Issues and Environmental Justice with Participatory Approaches”. Talk and panel.
- 2022 Understanding Risk Forum. Global Facility for Disaster Reduction and Recovery, 2022. Title: “Compounding heat and flood events: How does your work help understand risk?” Invited panel.
- 2022 American Ecological Engineering Society, University of Maryland Baltimore, 2022. Title: “Effective engagement with diverse communities, policy makers, and academics in watershed sustainability and resiliency”. Invited panel.
- 2022 River Rally Network: Connecting people and saving rivers, 2022. Title: “Supercharging a New Generation of CWA Advocates to Address 21st Century Challenges”. Invited panel.
- 2022 “*Sembrando Seeds*”. Latin American and Caribbean Studies Center (LACS), 2022. University of Maryland. Title: “Community Engagement for Flood Risk Reduction in South America. Invited talk.
- 2022 IV SEMAUR and I ECENGE Conferences of the UNINASSAU (Brazil), 2022. Title: “PLANEJEEE Project: Integrating social and environmental aspects for flood risk reduction”. Invited talk.

- 2021 Urban Water Debate - III Ciclo de Debates sobre Águas Urbanas of PPGECA - UFCC (Brazil), 2021. Title: "PLANEJEEE Project: Integrating social and environmental aspects for flood risk reduction". Invited talk.
- 2019 Soapbox Science Exeter (Exeter, United Kingdom), 2019. Title: "Can we reduce flooding with community help?". Invited talk.

Conferences presentations:

- Oral presentations

- 2024 "Between urban floods and droughts: mapping risks in Brazil and the United States". XV National Meeting on Urban Water (Brazil), Recife – Pernambuco, 2024
- 2023 "The use of GIS for catchment delineation: a bibliometric review". XXV Brazilian Water Resources Symposium, Aracaju, 2023
- 2023 "Community-Driven Research on Sanitary Sewer Overflows and Basement Backups". At the American Water Resources Association (AWRA) 2023 National Capital Region Water Resources Symposium.
- 2022 "Navigating the Definition of Urban Flooding: A Conceptual and Systematic Review of the Literature". At the ACSP Annual Conference 2022.
- 2021 "Assessing the benefits and disbenefits of Nature-Based Solutions for flooding risk reduction in urban areas". At the virtual conference of AQUA≈360: Water for All - Emerging Issues in September 2021.
- 2020 "Social-environmental approach for the calibration of flooding models". At the XIII Encontro Nacional de Águas Urbanas in Porto Alegre - RS (Brasil) – October 2020.
- 2020 "Evaluation of a socio-environmental approach for Disaster Risk Management". At the WATEF- Water Efficiency in Buildings Network in September 2020.
- 2020 "Building a historical flooding map through spatial analysis". At EGU General Assembly, 2020. Remote format. DOI: <https://doi.org/10.5194/egusphere-egu2020-1183>
- 2019 "Challenges for SuDS implementation in developing countries context: do governance arrangements make it harder?". At the VIII Oxbridge Conference on Brazilian Studies in October 2019, Cambridge (UK).
- 2019 "Assessment of a GIS-MCDM approach to Hazard, Vulnerability and Exposure Mapping in city-scale. At the 17th International Computing & Control for the Water Industry Conference in September 2019.
- 2018 "Dynamic scenarios and water management simulations: towards to an integrated spatial analysis approach in water urban planning". At the 13th International Conference on Hydroinformatics (HIC) in July 2018. Palermo (Italy).
- 2017 "Tetos verdes como medida compensatória de drenagem urbana: Proposta para o agreste paraibano" (ENG: "Green roofs as a compensatory measure for urban drainage: A proposal for the rural region of Paraíba" At the XXII Simpósio Brasileiro de Recursos Hídricos, 2017, Florianópolis (Brazil).
- 2016 "Indicadores de qualidade ambiental em condomínios horizontais: um estudo de caso em Campina Grande/PB" (ENG: "Environmental quality indicators in horizontal condominiums: a case study in Campina Grande/PB"). At PLURIS, 2016, Maceió – Alagoas (Brazil)
- 2016 "Uso de medidas sustentáveis para mitigação de casos de inundações e alagamentos nas áreas urbanas: Estudo de caso em Campina Grande – PB" (ENG: "Use of sustainable measures to mitigate flooding cases in urban areas: a case

- study in Campina Grande – PB”). At the ENSUR, 2016, Campina Grande – PB (Brazil)
- 2015 “Estimativa de potenciais problemas na microdrenagem urbana a partir de uma avaliação multicriterial espacial”(ENG: “Estimation of potential challenges in urban microdrainage from a spatial multi-criteria assessment”). At the 5a Reunião de Estudos Ambientais, 2015, Porto Alegre (Brazil).
- 2015 “Proposição de medidas compensatórias para o sistema atual de drenagem urbana de Campina Grande-PB” (ENG: “Proposition of compensatory measures for the current urban drainage system of Campina Grande - PB”). At the XXI Simpósio Brasileiro de Recursos Hídricos, 2015, Brasília (Brazil)
- 2014 “Avaliação do Sistema de Drenagem Pluvial, na cidade de Campina Grande - Paraíba, o caso do Canal das Piabas” (ENG: “Evaluation of the Pluvial Drainage System, in the city of Campina Grande - Paraíba, the case of Canal das Piabas”). At the XII Simpósio de Recursos Hídricos do Nordeste, 2014, Natal (Brazil)

- Poster presentations

- 2024 Si., Q., **Alves, P.**, Hendricks, M., Pavao-Zuckerman. Leveraging Social Media to Capture Stormwater Perceptions and Environmental Engagement in the Washington Metropolitan Area, USA. AGU Conference. 2024
- 2024 Alves, L. M., Rufino, I., **Alves, P. B. R.**, Brito, H., Aragão, R., Braga, C., Silva, C., Ribeiro, M., Oliveira, G. Water Security Challenges in Brazil: An Integrated Hydrological and Social Perspective. AGU Conference. 2024
- 2024 **Alves, P. B. R.**, Goode, M., Worner, E. H., Levell-Young, T., Anderson-Coughlin, B., An, N., Abu, J., Dixon, K., Barlow, C., Johnson, B., Smith-Hams, T., Volpitta, A., Crews, R., Brown, M. Rosenberg Goldstein, R. E., Hendricks, M. D. Environmental and Community-Driven Methodology to Address Risks from Sanitary Sewer Overflows and Basement Backups. AGU Conference. 2024
- 2024 **Alves, P. B. R.**, Goode, M., Worner, E. H., Levell-Young, T., Anderson-Coughlin, B., An, N., Abu, J., Dixon, K., Barlow, C., Johnson, B., Smith-Hams, T., Volpitta, A., Crews, R., Brown, M. Rosenberg Goldstein, R. E., Hendricks, M. D. Environmental and Community-Driven Methodology to Address Risks from Sanitary Sewer Overflows and Basement Backups. UNC Water & Health Conference. 2024
- 2024 Goode, M., Abu, J. J., **Alves, P. B. R.**, Worner, E. H., Levell-Young, T., Anderson-Coughlin, B., An, N., Abu, J., Dixon, K., Barlow, C., Johnson, B., Smith-Hams, T., Volpitta, A., Crews, R., Brown, M. Rosenberg Goldstein, R. E., Hendricks, M. D. Impacts of Sanitary Sewage Overflows and Basement Backups on Mental Health: The case of Baltimore, MD. UNC Water & Health Conference. 2024
- 2024 Barlow, C., Anderson-Coughlin, B., Dixon, K. P., **Alves, P. B. R.**, Hendricks, M. D., Rosenberg Goldstein, R. E. Impact of Cleaning Methods on Bacteria from Sanitary Sewer Overflows and Flooding in Baltimore Maryland. UNC Water & Health Conference. 2024
- 2023 Healey, E. M., **Alves, P. B. R.**, Hendricks, M. D., & Rosenberg Goldstein, R. Evaluating the risk of residential exposure to antibiotic-resistant bacteria from sanitary sewer overflows (SSOs) and basement backups in Baltimore, Maryland. Presented at the UNC Water & Health Conference. 2023.
- 2023 Healey, E. M., **Alves, P. B. R.**, Hendricks, M. D., & Rosenberg Goldstein, R. Basement backups and bacteria: Evaluating the risk of residential exposure to antibiotic-resistant bacteria from sanitary sewer overflows and basement backups. Presented at the National Capital Region Water Resources Symposium. 2023.

- 2023 Healey, E. M., **Alves, P. B. R.**, Hendricks, M. D., & Rosenberg Goldstein, R. Basement backups and bacteria: Evaluating the risk of residential exposure to antibiotic-resistant bacteria from sanitary sewer overflows and basement backups. Presented at the University of Maryland's Advancing Public Health Research and Practice: Research Interaction Day. 2023
- 2023 Si, Q., Costa, H., **Alves, P. B. R.**, Pavao-Zuckerman, M., Hendricks, M., "Spatial Approaches to Refining Urban Catchment Delineation that Integrate Stormwater Network Infrastructure". American Water Resources Association (AWRA) in April 2023, Washington DC.
- 2023 Si, Q., Costa, H., **Alves, P. B. R.**, Pavao-Zuckerman, M., Hendricks, M., "Spatial Approaches to Refining Urban Catchment Delineation that Integrate Stormwater Network Infrastructure". American Geophysical Union Conference (AGU, Dec 2023) in San Francisco, CA.
- 2022 Si, Q., **Alves, P. B. R.**, Burke, T., Hendricks, M., Pavao-Zuckerman, M. "Exploring the Internet of Things (IoT) Sensors for Monitoring Stormwater Dynamics at Three Urbanized Campus Catchments in College Park, MD". American Ecological Engineering Society (AEES) 2022 Annual Conference (June 2022, Baltimore, MD)
- 2022 Si, Q., **Alves, P. B. R.**, Burke, T., Hendricks, M., Pavao-Zuckerman, M. "Exploring the Internet of Things (IoT) Sensors for Monitoring Stormwater Dynamics at Three Urbanized Campus Catchments in College Park, MD". UMD AGNR Cornerstone Event (Oct 2022, UMD).
- 2017 Da Silva, W. K. B, **Alves, P. B. R.**, dos Santos, K. A., Valentim, F. C. A., Rufino, I. A. A. "Green Roofs as a Mitigation Strategy for Urban Drainage: A Proposal in Paraíba". At the XII Simpósio de Recursos Hídricos do Nordeste, 2017, Florianopolis (Brazil).
- 2014 **Alves, P. B. R.**, Rufino, I. A. A., Feitosa, P. H. C. "Diagnostic of the Urban Drainage System of Campina Grande – PB"). At the XII Simpósio de Recursos Hídricos do Nordeste, 2014, Natal (Brazil).

Significant Works in Public Media

Media and Press

- 2024 "Water Emergency Team Advances Research and Community Outreach" by Division of Research UMD <<https://research.umd.edu/articles/water-emergency-team-advances-research-and-community-outreach>>
- 2024 "Stormwater Hits D.C.'s Poorest Neighborhoods Hardest, UMD Study Finds", by Maggie Haslam^{1,2}
¹<https://today.umd.edu/stormwater-hits-d-c-s-poorest-neighborhoods-hardest-umd-study-finds>
²<https://www.aau.edu/research-scholarship/featured-research-topics/stormwater-hits-dcs-poorest-neighborhoods-hardest-umd>
- 2023 "Introducing one of this year's Young Pros: Priscila Alves" by Katie Johns. <<https://www.stormwater.com/awards/video/53061981/2023-young-pros-priscila-alves>>
- 2021 "Featuring the International "To Plan for Extreme Events" (PLANEJEEE) Project" by ASCOM UFCG <<https://portal.ufcg.edu.br/ultimas-noticias/2483-projeto-planejee-recebeu-destaque-em-jornal-americano.html>>
- 2020 "Your city has water problems? She's got solutions" by Alexander Villegas The New York Times.

<<https://www.nytimes.com/2020/11/18/climate/trumps-arctic-refuge-drilling-push.html>>

2019 "Flooding Reduction Research Project in Campina Grande" Radio Interview (for CAMPINA FM 93.1)

Funded Research and Grants

Approved

1. "Adaptation and resilience to water-related disasters: A collaborative and multidisciplinary approach between Brazil and the United States". Funding: CAPES – Edital 15/2024. Total requested: NA (2025-current). Role: PI
2. "Resilience and mitigation of water-related risks in vulnerable communities: Sharing Participatory Approaches and Experiences". Funding: MCTI/CNPq Public Call No 16/2024. Total requested: \$65,000. (2025-current). Role: Other personnel
3. "IoT-enabled, a hyper-local stormwater living laboratory at UMD". Funding: UMD Sustainability Fund. Total requested: \$65,000 (2024-current). Role: Co-PI
4. "Water Emergency Team (WET): Community-Driven Rapid Response Team to Evaluate Antibiotic-Resistant Bacteria Exposures and Household Environmental Health Risks from Sewer Overflows and Basement Flooding". Funding: NIH Director's New Innovator Award. Total requested: \$1,300,000 (2023-current). Role: Other personnel
5. "Community-Driven Rapid-Response Water Emergency Team". Funding: UMD Grand Challenges. Total requested: \$650,000 (2023-current). Role: Other personnel
6. "Water Security of Paraíba municipalities (SIGMA): An integrated modeling of climate variability, natural and anthropic dynamics". Funding: FAPESP/FAPESQ. Total requested: \$40,000 (2023-current). Role: Other personnel
7. "A risk-based spatial-participatory framework for flooding mitigation in the semiarid region of Brazil". Funding: CAPES (Brazilian Funding Agency). (2017-2021) Total requested: £137,000 (~\$165,000). Role: PI (Dissertation project)

Submitted

In Preparation

1. "Pluvial Flood Resilience at the Water Infrastructure Nexus (Storm-, Waste- and Drinking Water): A Multidisciplinary Analysis Between Maryland, US and Paraíba, BR". Total to be requested: \$1,500,000. To be submitted to: National Science Foundation (NSF). Role: Co-PI

Previously Attempted:

1. "Infrastructure Justice and Equity Research: Clearinghouse for Equity in Public Infrastructure Investment". Total requested: \$1,000,000. Spencer Foundation. Role: Other personnel
2. "Internet of Things Deliverables". FEMA Brick Program. Role: Other personnel
3. "Anacostia Restoration Watershed Partnership". Total requested: \$1,000,000. Whole Watershed Act and Fund. Maryland Department of Natural Resources. Role: Other personnel

Research Fellowships, Prizes and Awards

2025 *Research Fellowship*. Awarded by CAPES (Brazil) for conducting the research titled "Adaptation and resilience to water-related disasters: a collaborative and

	multidisciplinary approach between Brazil and the United States” (SCBA n 88881.129673/2016-01, SEI 23038.002572/2024-87).
2023	<i>Award:</i> 2023 Storm Young Pros < https://www.stormwater.com/home/article/53056148/stormwater-solutions-introduces-2023-young-pros >
2020	<i>Award.</i> Best Postgraduate Student of CAPES (Brazilian Government Association) Awarded as a the Featured Scholarship PhD Student by the Brazilian Government Funding (CAPES) < https://www.gov.br/capes/pt-br/assuntos/noticias/medidas-verdes-combinadas-reduzem-alagamentos-em-ate-85 >
2019	<i>Award.</i> 10 Best Articles of the VI Urban Water Conference (ENAU) in 2019
2019	<i>Research Fellowship</i> to participate of the Young Professional in Water Resources Management Training from International Association for Hydro-Environment Engineering Research (IAHR).
2016	<i>Research Fellowship.</i> Doctoral fellowship awarded by CAPES (Brazil) to conduct the research titled “An integrated spatial-participatory framework for flood risk mitigation in the semiarid region of Brazil” at the University of Exeter, United Kingdom.
2012	<i>Research Fellowship.</i> Undergraduate fellowship awarded by CAPES/FIPSE to engage in an exchange program at the University of New Mexico, US.

III. Teaching, Extension, Mentoring and Advising

Courses Taught

Spring 2025	Diversity and the City – URSP 372 (Urban Studies and Planning Program, University of Maryland), 22 students. Instructor of record.
Fall 2024	Water Management in Urban Environments – ENST 485 (Department of Environmental Science and Technology, University of Maryland), 18 students. Instructor of record.
Spring 2024	Diversity and the City – URSP 372 (Urban Studies and Planning Program, University of Maryland), 20 students. Instructor of record.
Fall 2021	Sustainable Engineering (University of Exeter, United Kingdom). 220 students. Postgraduate Teaching Assistant.
Fall 2020	Sustainable Engineering (University of Exeter, United Kingdom). 220 students. Postgraduate Teaching Assistant.
Spring 2017	Geospatial Technologies (GIS) University of Campina Grande, Brazil. 60 students. Postgraduate Teaching Assistant.
Summer 2017	Lean Construction and Development, Integrated Faculty of Patos (FIP), Brazil, 30 students. Instructor of record. Short-term course.
Summer 2017	Fire prevention and Early Warning, Instituto Federal da Paraíba (Brazil), 40 students. Short-term course.
Spring 2017	Vibrations and Abnormal Pressures, Integrated Faculty of Patos (FIP), Brazil, 25 students. Instructor of record. Short-term course.
Spring 2017	Workspace Quality, Integrated Faculty of Patos (FIP), Brazil, 40 students. Instructor of record. Short-term course.
Spring 2017	Construction Costs and Budgets, Integrated Faculty of Patos (FIP), Brazil, 30

students. Instructor of record. Short-term course.

Spring 2015 Building's structure construction, SENAI (Brazil), 30 students. Instructor of record.

Spring 2014 Building's structure construction, SENAI (Brazil), 25 students. Instructor of record.

Research Advising

All Advisees

2024- present	Karla Avevedo, PhD, University of Campina Grande (UFCG)
2024- present	Ingrid Moreira, MS, University of Campina Grande (UFCG)
2023-2025	Milena Amaral, MS, University of Campina Grande (UFCG)
2022-2024	Geovanna Oliveira, MS, University of Campina Grande (UFCG)
2017	Lorena Oliveira, BS, University of Campina Grande (UFCG)
2017	Jader Brito, BS, University of Campina Grande (UFCG)
2017	Wanessa Silva, BS, University of Campina Grande (UFCG)

Doctoral

2025	Co-Chair , Karla Azevedo, PhD Student in Civil and Environmental Engineering, University of Campina Grande (UFCG), Brazil
2024	Committee Member , Minkyu Park, PhD Candidate in Urban Planning & Studies., School of Architecture, Planning and Preservation, University of Maryland
2022	Committee Member , Minkyu Park, PhD Candidate in Urban Planning & Studies., School of Architecture, Planning and Preservation, University of Maryland
2022	Committee Member , Higor de Costa, PhD Candidate in Civil and Environmental Engineering, Federal University of Campina Grande (UFCG), Brazil
2022	Committee Member , Fagner França da Costa, PhD Candidate in Civil and Environmental Engineering - Federal University of Campina Grande (UFCG), Brazil

Masters

2025	Committee Member , Angelo Costa, MS Candidate in Civil and Environmental Engineering, Federal University of Campina Grande (UFCG), Brazil
2025	Co-Chair , Ingrid Moreira, MS Student in Civil and Environmental Engineering, University of Campina Grande (UFCG), Brazil
2025	Co-Chair , Milena Amaral, MS Candidate in Civil and Environmental Engineering, University of Campina Grande (UFCG), Brazil
2024	Co-Chair , Geovanna Oliveira, MS Candidate in Civil and Environmental Engineering, University of Campina Grande (UFCG), Brazil
2024	Co-Chair , Milena Amaral, MS Student in Civil and Environmental Engineering, University of Campina Grande (UFCG), Brazil
2023	Co-Chair , Geovanna Oliveira, MS Student in Civil and Environmental Engineering, University of Campina Grande (UFCG), Brazil

Undergraduate

2017	Co-Chair , Lorena Thaís Freitas de Oliveira, BS Student in Civil Engineering, University of Campina Grande (UFCG), Brazil
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- 2017 **Co-Chair**, Wanessa Karoline Bezerra da Silva, BS Student in Civil Engineering. University of Campina Grande (UFCG), Brazil
- 2017 **Co-Chair**, Jader Sales de Brito Junior, BS Student in Civil Engineering. University of Campina Grande (UFCG), Brazil
- 2018 **Committee Member**, Brenda de Oliveira Costa, BS in Civil Engineering - Federal University of Campina Grande (UFCG), Brazil
- 2017 **Committee Member**, Fernanda de Carvalho Almeida Valentim. BS in Architecture and Urbanism, Federal University of Campina Grande (UFCG), Brazil

Professional and Extension Education

Guest Lectures

- Spring 2025 “Origins of Sustainable Development and Contemporary Goals”. Instructor: Marccus Hendricks, URSP 668 – The Sustainable Cities, University of Maryland
- Fall 2023 “Dynamic vulnerability and Maladaptation”. Instructor: Gerrit Knaap, URPD 810 - Contemporary Metropolitan Issues, University of Maryland
- Spring 2023 “Equitable and Resilient Water Resources Management”, Instructor: Mitchell Adam Pavao-Zuckerman, ENST 607 - Resilience and Adaptation in Cities, University of Maryland
- Spring 2023 “Equity in Research”, Instructor: David J. Lovell, Gemstone Panel on Equity in Research, University of Maryland

IV. Service and Outreach

Journal Reviewer

Urban Water Journal
 Water Science and Technology
 Journal of Infrastructure Systems
 Hydrological Sciences Journal
 Natural Hazards
 Engenharia Sanitária e Ambiental
 International Journal for Disaster Risk Reduction
 Journal of Planning Education and Research
 Clean Technologies and Environmental Policy
 Cambridge Prisms: Water

Campus Service – Postgraduate Programs

- 2024- present Urban Planning & Studies Program (URSP) at University of Maryland
- 2022- present Civil and Environmental Engineering Program (PPGECA) at University of Campina Grande

Campus Service - Advising Civil and Environmental Engineering (CEE) University of Maryland

- Spring 2023 “Baltimore 311 Request – disparities in calls/response times for infrastructure and other request” – 3 CAPSTONE projects (5 students each)

Spring 2023

“Low-cost Unmanned Aerial Vehicle System for use in Search and Rescue operations following a Flooding” – 1 GEMSTONE project (5 students)

V. Other Information

Technical Expertise

1. GIS mapping: ArcGIS Pro (ESRI), ArcMap (ESRI). Familiar with QGIS software
2. Flooding modelling and assessment of sustainable solutions: Storm Water Management Model (SWMM - US EPA) and CADDIES (Weighted Cellular Automata 2D, University of Exeter, UK)
3. Multi-methods approach: Entropy, Analytic Hierarchy Process (AHP)
4. Statistics: Familiarity with Python and IBM Statistical Package for the Social Sciences (SPSS) software
5. Community-based participatory approaches (design and application): surveys, focus groups, interviews, workshops.

Courses and Certifications

2025	Social & Behavioral Research - Basic/Refresher (CITI - University of Maryland)
2022	Social & Behavioral Research - Basic/Refresher (CITI - University of Maryland)
2020	Spatial Data Science: The New Frontier in Analytics (ESRI)
2019	Co-creating Sustainable Cities (AMS Institute)
2019	Going Places with Spatial Analysis (ESRI)
2019	Python for Everyone (ESRI)
2019	Urban Drainage: Management and Sustainability (University of Paraiba - Brazil)
2019	Learning and Teaching for Higher Education (LTHE) – Stage 2, University of Exeter
2019	International Leadership Training Program for Water Professionals, Water Resources Management (IAHR)
2018	Learning and Teaching for Higher Education (LTHE) – Stage 1, University of Exeter
2018	Cartography (ESRI)
2018	Disasters and Ecosystems: Resilience in a Changing Climate (United Nations Environmental Program)
2017	Research Methodology, University of Exeter
2015	Environmental Management, University of Campina Grande
2015	Hydrology I, University of Campina Grande
2015	Hydrology II, University of Campina Grande
2015	Treatment and Water Supply, University of Campina Grande
2015	Water Resources Management, University of Campina Grande
2015	Remote Sensing applied to Natural Resources, University of Campina Grande
2015	Geotechnologies (GIS) applied for civil and environmental engineering, University of Campina Grande
2015	Sustainable cities, University of Campina Grande

Research Experience (*refers to research projects with community-based research approaches)

Current projects

2025 – present	Project: Adaptation and resilience to water-related disasters: a collaborative and multidisciplinary approach between Brazil and the United States” (University of Campina Grande and University of Maryland)
2025 – present	Project: Resilience and mitigation of water-related risks in vulnerable communities: Sharing Participatory Approaches and Experiences” (University of Campina Grande and University of Maryland)
2024 - present	Project: “Alternative Crops & Renewable Energy Delmarva (ACRE)” (University of Maryland)*
2023-present	Project: “Water Emergency Team (WET)” (University of Maryland)*
2023-present	Project: “SIGMA: Water Security in Municipalities of Paraíba: An integrated modeling of climate variability and natural and anthropogenic dynamics”. (University of Campina Grande, INPE National Institute of Spatial Research of Brazil and University of Maryland)*
2022-present	Project: “Urban Flooding, Infrastructure, and its Link to Social Vulnerability and Mobility: A Place-based Study in Washington D.C.” (University of Maryland)
2022-present	Project: “A Qualitative Study of U.S. Black Settlements, Racialized Topographies, Community and Infrastructure Development, Chronic Flooding, and Environmental Justice (University of Maryland)
2022-present	Project: “A Smart, Connected, and Sustainable Campus Community: Using the Internet of Things (IoT) and Sensor Technology to Improve Stormwater Management at UMD”. (University of Maryland)*

Past projects

2023-2024	Project: “Maryland Animal Waste Technology Assessment and Strategy Planning”. (University of Maryland)*
2022-2023	Project: “A Mixed-Methods Approach to Assess Experiences with Sanitary Risks and Pathways to Waterborne Exposures Associated with Vulnerable Infrastructure in Baltimore, MD”. (University of Maryland)*
2021-2022	Project: “Enhancing Resilience for future Hydro-meteorological extremes in the Mun River basin in the North-East of Thailand (ENRICH) (University of Exeter, UK)*
2021	Project: “Sanitation Plan: stormwater, raw sewage, drinking water and waste. GIS analysis of flooding, critical infrastructure, and recommendations of future actions”. (University of Campina Grande, Brazil)*
2017-2021	Project “To Plan for Extreme Events” (PLANEJEEE). (University of Exeter, UK and University of Campina Grande, Brazil)*
2015-2017	Project: “BRAMAR: Strategies and Technologies for Water Scarcity Mitigation in Northeast of Brazil”. Modelling water scarcity in several Brazilian municipalities (University of Campina Grande, Brazil)

2015-2017	Project: "Environmental Modelling and the Smart Cities Challenges: Modelling and assessment of Nature-Based Solutions (NBS) for urban areas". (University of Campina Grande, Brazil)
2013-2015	Project: "Sanitation Plan: stormwater, raw sewage, drinking water and waste. GIS analysis of flooding, critical infrastructure, and recommendations of future actions". (University of Campina Grande, Brazil)*
2012-2012	Project: "Preservation of Water Resources and Sustainable Development of Arid and Semiarid regions: A Brazil-US consortium for Interdisciplinary Actions". (College of Engineering, University of New Mexico).