

Sandesh Lamsal

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 @sandslamsal

 sandslamsal



Employment History

- 2022 – Present  **Research/Teaching Assistant**, Civil and Architectural Engineering, University of Miami, Coral Gables, FL
- 2021 – 2022  **Graduate Teaching Assistant**, Texas Tech University, Lubbock, TX
- 2019 - 2021  **Project Manager**, Isotech Consultants, Kathmandu, Nepal
- 2017 - 2019  **Civil Engineer**, Isotect Consultants, Kathmandu, Nepal
- 2017 - 2021  **Civil Structural Engineer (Part-time)**, Tensile Structures (P.) Ltd., Kathmandu, Nepal

Education

- 2022 – Present  **Ph.D., Civil Engineering (Structures)** University of Miami, Coral Gables, FL
- 2021 – 2022  **M.S., Civil Engineering (Structures)** Texas Tech University, Lubbock, TX
- 2013 – 2017  **Bachelor's Degree, Civil Engineering** Tribhuvan University, Kathmandu, Nepal

Research Publications

Conference Proceedings

- 1 G. Aguilar, S. Lamsal, P. Tan, A. Uriarte, B. Haus, and L. Rhode-Barbarigos, “Investigating hurricane-induced wind and wave loads through scaled physical testing,” 2024.
- 2 S. Lamsal, G. Aguilar, P. Tan, G. Clark, B. Haus, and L. Rhode-Barbarigos, “A sustainable and efficient structural solution for hybrid coral reefs,” 2024.
- 3 S. Lamsal, G. Aguilar, P. Tan, *et al.*, “Quantifying wave energy dissipation in perforated breakwater structures: An experimental study with porous hexagonal seahive configurations,” 2024.
- 4 B. K. Norris, B. Reguero, C. G. Lasserre, *et al.*, “Reefense: Design considerations in developing low-crested structures with reef restoration for coastal defense,” 2024.

Skills

- | | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Languages |  Nepali (Native Speaker), English. |
| Coding |  MATLAB and Python, Machine Learning (Supervised Learning, Unsupervised Learning, Reinforcement Learning, Deep Learning, TensorFlow, PyTorch, Regression, Classification, Clustering, Neural Networks) |
| Software |  CSI SAP2000, ETABS, ABAQUS, AutoCAD, REVIT |
| Analysis |  Earthquake Load, Wind Load, ASCE 7-16, ACI 318-19, FEM Linear Analysis |

Skills (continued)

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|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design | ■ Reinforced Concrete Building Design, Steel Building Design, Steel Connection Design, 2D and 3D Drafting of Building and Bridges with Rebars and Steel Shop Drawing Preparation |
| Research | ■ Structural Engineering, Coastal Engineering, Morphological Investigation, Physical Testing, Wind and Wave Loading Effects, Building Design Codes, Resilience. |
| Leadership | ■ Team Leadership, Project Management, Collaboration. |

Miscellaneous Experience

Awards and Achievements

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|------------|-----------------------------------------------------------------------------------------------------------|
| 2021.11.14 | ■ Engaged Scholarship Award , Texas Tech University, TX, USA |
| 2021.08.12 | ■ Edward E. Whitacre Jr. College of Engineering Merit Based Award , Texas Tech University, TX, USA |

Certifications

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| 2024-02-23 | ■ OpenFoam CFD , OpenFoam Ltd. UK |
| 2023-12-01 | ■ Machine Learning , University of Miami |
| 2019-07-01 | ■ Bridge Design Certification , Engineering Helpline Pvt. Ltd. |
| 2018-02-01 | ■ Professional Engineering Certificate , Nepal Engineering Council |

Involvements

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|----------------------|------------------------------------------------------------------------------------------|
| 2024 | ■ GSA Senate , University of Miami |
| World Ocean Day 2023 | ■ Volunteer , X-REEFS Showcasing Research at Frost Science Museum, Miami |
| 2021 – 2022 | ■ Member , TTU ASCE Students Society |
| Since 2018 | ■ Active member , American Society of Civil Engineers(ASCE) |
| | ■ Member , Nepal Engineers' Association |
| 2015 – 2017 | ■ Secretary , National College of Engineering Civil Engineering Student's Society |

References

Dr. Landolf Rhode-Barbarigos

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Dr. Brian Haus

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