

Sandesh Lamsal

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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**, Isotech 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)

- 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

- 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

- 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

- 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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