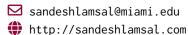
# Sandesh Lamsal



🄰 @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	<b>Bachelor's Degree, Civil Engineering</b> Tribhuvan University, Kathmandu, Nepal

### **Research Publications**

## **Conference Proceedings**

- 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.
- 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.
- 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.
- 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

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 Rigineering 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

Associate Professor Department of Civil and Architectural Engineering University of Miami,

landolfrb@miami.edu

#### Dr. Brian Haus

Professor

Department Chair of Ocean Sciences

University of Miami,

b.haus@miami.edu