Sandesh Lamsal

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http://sandeshlamsal.com

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. 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.
2. 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 Fluent in 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

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

2021.08.12 **Engaged Scholarship Award**, Texas Tech University, TX, USA

20221.11.14 **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
Associate Professor
Department of Civil and Architectural Engineering
University of Miami,
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Dr. Brian Haus
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Department Chair of Ocean Sciences
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