



PERSONAL SUMMARY

Highly motivated and innovative Coastal Engineer with expertise in coastal hydrodynamics and morphodynamic processes. I enjoy working in teams, collaborating with colleagues and solve complex coastal engineering problems.

EDUCATION BACKGROUND

Ph.D. in Coastal Engineering	2020
University of Florida	
- Numerical modelling of morphodynamics in coastal environments	
Grade Point Average (GPA) 4.00 from 4.00 (100%)	
M.Sc in Coastal Engineering	2017
Delft University of Technology (TU Delft), The Netherlands	
Erasmus Mundus Program in Coastal and Marine Engineering and Management (CoMEM)	
Average grade 8.48 from 10 (84.8%)	
- Norwegian University of Science and Technology, Norway (Semester 1)	2015 (fall)
- TU Delft, The Netherlands (Semester 2)	2016 (spring)
- University of Southampton, The United Kingdom (Semester 3)	2016 (fall)
- Deltares/TU Delft, The Netherlands (Semester 4)	2017 (spring)
B.Sc in Civil Engineering (Honors)	2014
University of Moratuwa, Sri Lanka	
Grade Point Average (GPA) 3.83 from 4.20 (91.2%) , First class	

CAREER HISTORY

Graduate Research Assistant	
- Department of Civil and Coastal Engineering, University of Florida	
PhD thesis : Improving the modeling of onshore sandbar migration and beach recovery	2018-present
Internship	
- Deltares, The Netherlands	2017 (spring)
Masters thesis : Wave transformation in mangrove coasts, A model study using XBeach	
- Coastal Research Centre (FZK), Hannover, Germany	2016 (summer)
Analytical superposition of nonlinear waves in shallow water within a nonlinear Fourier transform using MATLAB	
Lecturer on Contract, University of Moratuwa, Sri Lanka	2017 & 2014-2015
- Hydraulic Engineering Division at the Department of Civil Engineering	
Visiting Lecturer	
- Colombo school of Construction and Technology (Affiliated with University of Salford, UK)	2015
- City and Guilds Level 6 modules in graduate diploma in Engineering at SEI Campus Sri Lanka	2015
Research Assistant	2014 March
- Tsunami vulnerability study of coastal region in Sri Lanka	
Trainee Civil Engineer	May-Oct 2012
- Urgent renovation works at Unity Container Terminal, Port of Colombo, Sri Lanka	

EXPERIENCES AND SKILLS

Numerical modelling

- Expert proficiency in numerical modelling with XBeach
- Proficiency in numerical modelling with Delft3D and SWASH
- Proficiency with Machine Learning models and applications

Model development

- Expert proficiency in implementation and development in XBeach and SWASH source codes
- Implementing a cross-shore process based morphodynamic model to study sandbar migrations in MATLAB

Computer programming skills

- Expert proficiency in programming with MATLAB and Fortran
- Proficiency in programming with Python
- Experience in working with supercomputer architecture and data handling

Field work experience

- Data collection using ADCP and drone imagery at Sapelo Island Estuarine Reserve, GA

NON-ACADEMIC QUALIFICATIONS

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| Mayor of the graduate student housing – Maguire village, University of Florida | 2019- 2020 |
| Junior treasurer - Civil Engineering Society (CES) - University of Moratuwa | 2013-2014 |

Debating

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| - Participation at Hulsdorf Debate, Sri Lanka Law College | 2012 |
| - Participation and Octo finalist at the X th NLS Debating Tournament - Bangalore, India | 2012 |

Scouting

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| - Participation to Sri Lanka Model United Nations, Colombo, Sri Lanka | 2004 |
| - Participation to SAARC Friendship Camp- Thimpu, Bhutan | 2002 |

PUBLICATIONS

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| - Hewageegana V.H and A. Canestrelli “Numerical modelling of the influence of tides on cross shore sediment dynamics” under review in Continental Shelf Research | 2019 |
| - Hewageegana V.H and A. Canestrelli “Improving the modeling of onshore sandbar migration: The Duck, NC case “ under review Earth Surface Processes and Landforms | 2020 |

POSTER PRESENTATIONS

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| - Hewageegana, V.H, “Wave Transformation through mangrove coasts – A model study using XBeach Surfbeat”. Poster session presented at XBeachX conference, Delft Software Days 2017, Delft, NL | 2017 |
| - Hewageegana, V. H., and A. Canestrelli. "Numerical modeling of the influence of tides on beach morphodynamics." AGU Fall Meeting. 2018, Washington D.C. | 2018 |

ORAL PRESENTATIONS

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|---|------|
| - Hewageegana, V.H, Jayawardena, D.M.S.S, Ratnasooriya, A.H.R. “Tsunami Hazards: Energy Dissipation and Impact Mitigation Using Bio Shields” Civil Engineering Research Symposium , SL | 2014 |
| - Hewageegana, V. H., and A. Canestrelli. “Tidal influence on coastal morphodynamics” Science by the shore symposium 2018, Whitney Laboratory, St Augustine, FL | 2018 |
| - Hewageegana, V. H., and A. Canestrelli. “On the predictability of sandbar migration rates: Duck, NC case” 6th Young Coastal Scientists and Engineers Conference – Americas, Corvallis, OR | 2019 |
| - Hewageegana, V. H., and A. Canestrelli. "On the ability of 2D, quasi-3D and 3D numeric models to predict sandbar migration: The Duck, NC case" AGU Fall Meeting 2019, San Francisco, CA | 2019 |
| - Hewageegana V.H and A. Canestrelli “A simplified method to predict onshore sandbar migration: The Duck, NC case “Ocean Sciences meeting 2020, San Diego, CA | 2020 |
| - Hewageegana V.H and A. Canestrelli “Predicting sandbar migration using a phase resolving 3D numerical model” AGU Fall Meeting 2020, San Francisco, CA | 2020 |

WORKSHOPS AND SYMPOSIUMS

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| - XBeach advanced course, Delft Software Days 2017, Delft, Netherlands | 2017 |
| - DUNEX Coastal Processes and Engineering Training course, Field Research Facility, Duck, NC | 2019 |

PERSONAL DETAILS

Date of birth	December 11 th 1989
Gender	Male
Nationality	Sri Lankan

NON-RELATED REFEREES

Alberto Canestrelli, Ph.D
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