Diana Martins



Contact

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Languages

Portuguese – Mother Tongue

English – C2

Spanish – C2

Italian - C2

German - A2

Summary

Physical Oceanographer with insights in Civil Engineering, coastal processes and hydraulics. Experienced with Nemo Ocean model, ROMS ocean model, WRF atmospheric model and programming languages such as Matlab, Python and FORTRAN.

Skill Highlights

- Multidisciplinary
- Good communication
- Motivated

- Enthusiastic
- Team spirit
- Curious

Experience

Junior Research Associate - 01/2020 - present Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici CMCC, (IESP Institute – ROFS Division), Lecce (Italy).

- Black Sea Model Developments Research Unit responsible.
- Research and development of the ocean circulation numerical model for the Black Sea region as part of the Black Sea physical system in the framework of Copernicus Marine Environment and Monitoring Service.
- Work environment in collaboration with senior scientists, software engineers, data assimilation group.
- Insights on operational chain for a forecast product.
- Contact with different European partners.
- Development of tools for analysis and validation.

Research Assistant - 10/2013 – 12/2015

CENTEC, Lisbon (Portugal)

- Prediction of good weather conditions to conduct works in the ocean (weather windows).
- Gained knowledge in wave analysis and ship hydrostatics.

Civil Engineer - 10/2006 – 11/2009 SOPSEC, SA, Porto (Portugal)

- Design, planning and sizing of water distribution, sewage and rainwater disposal networks for numerous building related projects, such as schools, hotels, hospitals and small residential areas.
- Desktop study, support in construction phase and working together with all the specialists and entities involved in the project.

Education

PhD: Numerical modeling - unfinished MARUM and Bremen University (Germany)

- Use of a regional coupled ocean-atmosphere model in two study areas: North Sea and New Zealand to have projections for the ocean circulation under the RCP 8.5 climate scenario.
 Ocean model ROMS and atmosphere model WRF.
- Research stay at the National Institute of Water and Atmospheric Research (NIWA), (New Zealand).
- Supervision of Prof. Dr. Michael Schulz, Dr. André Paul and Dr. Mark Hadfield.

MSc: Marine Sciences: Oceanography and Marine Environment Management - 2012

UPC and University of Barcelona (Spain)

- Physical Oceanography, numerical wave modelling, coastal system planning and management, sediment transport and coastal evolution, risk management in estuarine and coastal zones.
- Final research project: Characterization of the wave climate off the Mozambique coast".
- Supervisor: Dr. Francesc Xavier Gironella I Cobos

MEng: Civil Engineering - 2006 FEUP University of Porto (Portugal)

- Main subjects: Hydraulics, Fluid mechanics, hydrology and water resources, maritime structures.
- Final thesis: Monitoring groins and sea walls in the Portuguese coast.

Supervisor: Prof. Fernando Francisco Machado Veloso Gomes

IT skills

Numerical modeling: **NEMO, COAWST, ROMS, WRF, SWAN**.

Programming: MatLab, Python and FORTRAN. Others: NCO, CDO, MapInfo(GIS), AutoCAD.

Other

- Nemo model developer since 2022.
- Presentation at 15th Estuarine and Coastal Modeling Conference (ECM15), Seattle University (USA).
- Attendance to COAWST Modeling System Training, Woods Hole Oceanographic Institution, Woods Hole (USA).

Diana Wartins