# **Jonas Takeo Carvalho**

**L** +39 342 523 8090 ☑ jtcarvalho@gmail.com

#### **Education**

**Doctor of Science (D.Sc.)** 

Ocean and Earth Dynamics

Fluminense Federal University (UFF)

2015 - 2019

**Master of Science (M.Sc)** 

Meteorology

National Institute for Space Research (INPE)

2008 - 2010

**Bachelor degree** 

Oceanography

Monte Serrat University Centre 2003 – 2007

## Work Experience

## **Euro-Mediterraneo Center for Climate Change (CMCC)**

Post-doctoral Researcher - Oceanography

2022 – Present Lecce, Italy

- Very high resolution ocean and waves modelling for global and coastal regions
- Ocean wave model data, in situ and satellite analyses

#### Federal University of Rio de Janeiro (UFRJ)

Post-doctoral Researcher - Ocean and Coastal Engineering

2021 - 2022

Rio de Janeiro, Brazil

- WRF high resolution simulations for coastal areas
- WRF calibration, operationalization and visualization focused on wind gustiness
- Ocean waves and weather forecast for partner companies and stakeholders.

## **National Institute for Space Research (INPE)**

Post-doctoral Researcher - Meteorology

2019-2021

Cachoeira Paulista, Brazil

- Teaching activities at Remote Sensing and Meteorology Graduate Program.
- Graduate advisor using satellite-derived and reanalyses wind field data at Antartic Peninsula. Leandro Lanes Master Dissertation concluded (2021) in Remote Sensing.
- Graduate advisor focused on wave-ice interaction at Peninsula Antarctica region. Dayanis Montero Phd Thesis concluded (2024) in Meteorology.
- Atmosphere, ocean and sea ice interaction via numerical studies using COAWST modeling framework.
- Support for students and projects activities involving in situ and model data analyses and model simulation.

### **Center for Weather Forecasting and Climate Studies (CPTEC)**

2015-2018

Research Assistant

Cachoeira Paulista, Brazil

- Implementation and management of oceanic operational forecast for RIO2016 Olympic Games.
- Support for ocean forecast produts.
- MOM5 Global climatology simulation (1945-2007) for Brazilian Earth System Model (BESM).
- Development of tools for data visualization and statistics.

# **Brazilian Navy Hydrography Centre (DHN)**

2010-2015

- Support for Marine Meteorological Service.
- Implementation and management of oceanic operational forecast (WW3, SWAN, WAM and DELFT3D)
- Ocean Waves Climatology simulations (1979-2014) and analyses for Brazilian Navy Database.

## University of Sao Paulo (USP)

Internship program

2006-2007 Sao Paulo, Brazil

• Development of undergraduate thesis at Laboratory of Numerical Hydrodinamic Simulation.

# **Lunus Ambiental Company**

2005-2006

Internship program

Santos, Brazil

- Physical and geological *in situ* data collection for ambiental reports.
- Images analyses from Modis/Acqua chlorophyll data.

#### Technical skills

Languages Computational Personal English (Fluent), Portuguese (Native), Italian (Basic)

Python, Fortran, Shel scripting, Linux, HPC, Large Database analyses, Numerical Models

Ability to work in a team environment and also independently

#### **Awards**

Graduation Certificate of Merit
Institutional Capacity Building Program

Monte Serrat University Centre National Institute for Space Research 20082017