# Bruno Ferrero

Laboratory of Oceanography, Climate and Cryosphere - OC<sup>2</sup>, University of São Paulo São Paulo • Brazil +55 11 98195-0345 | brferrero@usp.br

#### Education

ongoing Ph.D. in Physical Oceanography

Oceanographic Institute, University of São Paulo

Start date: March-2016

B.S. in Computer Science

Institute of Mathematics and Statistics, University of São Paulo, Brazil

2009 M.S. in Physical Oceanography

Oceanographic Institute, University of São Paulo, Brazil

B.S. in Oceanography

Oceanographic Institute, University of São Paulo, Brazil

## Work Experience

2016–2017 **Research Assistant** @ OC<sup>2</sup>/PETROBRAS, São Paulo

Project: Tracking of Eddies in Climate Change Projection Scenarios

Activities: Eddy tracking algorithm implementation; Support to ocean dynamical downscaling;

Data visualization;

2014-2015 **Project Scientist** @ OC<sup>2</sup>/AGEDI, São Paulo/Abu Dhabi

Project: Regional Climate Change Modeling: Arabian Gulf Project: Desalination & Climate Change: Arabian Gulf

Activities: Ocean model results validation; Statistical data analysis;

Data Visualization; Report;

2011-2013 Research Assistant @ OC<sup>2</sup>/PETROBRAS, São Paulo

Project: Climate Change Impacts in Offshore Operations at Campos Basin

Activities: modeling support; Data analysis and visualization.

2010 **Quantitative Analyst** @ Dunamis Equity Partners, São Paulo

High frequency trading, backtest framework for quant strategies

## **Teaching Experience**

2008, 2010 — Differential and Integral Calculus I, Teaching Assistant at Univ. of São Paulo Mar-Jul

2009 Ocean System II, Teaching Assistant at Univ. of São Paulo, Mar-Jul

#### Additional Courses

2018 CESM Tutorial

National Center for Atmospheric Research Boulder/USA, one week duration, 2018

2018 CLIVAR Summer School on Sea Level Changes

FIO Qingdao/China, one week duration, 2018

2018 UNESCO/IOC Training Course on Ocean Forecast System

FIO Qingdao/China, one week duration, 2018

### Skills

#### Programming

C/C++, MS-C#, R, Matlab, Shell Script (Bash), Git (see my GitHub) NetCDF/NCO/CDO, Ferret/NOAA, NCL Python [Jupyter, NumPy, xarray, pandas, Matplotlib]

#### Languages

Portuguese (native), English (advanced), German (basic), French (basic)

#### Soft Skills

Logical thinking • flexibility • collaborative • commitment and responsibility

#### **Publications**

#### Journal articles

 Tonelli M.; Marcello, F.; Ferrero B.; Wainer I., Warm Deep Water variability during the Last Millennium in the CESM–LME: pre-industrial scenario versus late 20th-century changes, Geosciences (2019, accepted).

#### **Conference Presentations**

- 1. Ferrero et. al (2012), Local to regional climate dynamics for the South Atlantic ocean in down-scaled projections PART II: IPCC-AR4 scenario analysis, Planet Under Pressure 2012, London/UK
- 2. Ferrero et. al (2017), Global and Regional Sea Level in CMIP5 Models: piControl and historical Scenario, WCRP/IOC Sea Level Conference 2017, New York/USA