

Curriculum Vitae Francesco M. Benfenati



Personal information

Name / Surname

Minerbio (BO), Italy

Address

francesco.benfenati@cmcc.it

Email Nationality

Italian

Birth

 5^{th} of August 1997, Modena (MO), Italy

BENFENATI FRANCESCO MARIA

Education and training

Nov 2022 - now

PhD student of the 38^{th} cycle: Future Earth, Climate Change and Societal Challenges, University of Bologna. Affiliated to CMCC.

Jan 2025 - Apr 2025 Visiting student at Massachussets Institute of Technology (MIT), Department of Mechanical Engineering, Cambridge MA (USA).

February 2023

Achievement of the Basic Instruction Package for Meteorologists, as defined by the World Meteorological Organization (WMO).

October 2022

Master's Degree cum Laude in Physics of the Earth System, University of Bologna, with thesis in Physical Oceanography Submesoscale Features in Regions with Different Baroclinic Deformation Radius.

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March 2020

Bachelor's Degree in Physics at University of Bologna with thesis in Physical Oceanography Statistical Analysis of Oceanographic Extreme Events.

Scientific High School Diploma at Liceo Scientifico Statale N. Copernico in Bologna.

Research experiences and Projects

Feb 2023 - now Developing a new version of the MEDSLIK-II oil spill model and software.

Apr 2022 - now Free access project: a repository on GitHub (click here) for computing the baroclinic Rossby deformation radius in an ocean region of interest.

Mar - Sept 2022 As *Physics of the Earth System* student, master thesis about ocean submesoscale dynamics in the Northern Atlantic ocean.

Jul 2019 - Mar 2020 As *Physics* student, bachelor thesis about Significant Wave Height extreme events in the Mediterranean sea.

Languages proficiency

March 2016

Languages Italian (mothertongue), English (B2).

First Certificate in English (FCE), level B2, at Cambridge English Language Assessment.

Reading B2
Listening B2
Speaking B2
Use of English C1
Writing: B2
Total Score 176/190

May 2011 Key English Test (KET), level A2, at Cambridge English Language Assessment.

Computer skills

Page 2 - Curriculum vitæ of F. M. Benfenati Programming

Deep knowledge of Fortan, Python, MATLAB and LATEX. Deep knowledge of Object-Oriented Programming. Good knowledge of Unix-like Operating systems and Bash language.

Other

Usage of HPC cluster, DIFA, UniBo. Basic knowledge of C++, OpenOffice and Microsoft Office packages. Basic knowledge of NEMO ocean model. Good Knowledge of NEMO-based SURF platform. Good knowledge of numerical methods for ODEs, PDEs.

Personal skills

Interpersonal relationships

Due to my training as a Scout chief in AGESCI association, during the last years: **Team working, leadership, decision-making and planning skills**. Attention to issues such as coeducation and gender equality in co-leadership.

Additional information

Music

Good knowledge of doublebass/electric bass playing, due to the six years attendance of Music Conservatory in Bologna.

Volunteering activities

Volunteering activities at *Istituto Penale Minorile* and *Comunità per minori non accompagnati del Villaggio del Fanciullo*, in Bologna. At present, Scout Chief in AGESCI association.

Driving license

Driving License B (for cars).

Hobbies

Running, Trekking, Nature. Vegetable garden. Basic sailing.

Marital status

Married.