

PERSONAL INFORMATION

Raffa Mario

FONDAZIONE CMCC
Via Thomas Alva Edison, Caserta (Italy)

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WORK EXPERIENCE

01/01/2022 - ongoing

Research Unit Leader of REM (Regional Models)

CMCC Foundation - REgional Models and geo-Hydrological Impacts Division (REMHI)

Viale Thomas Alva Edison, Caserta (Italy)

Coordinator of Regional Models research unit for the climate simulation activities. Main projects: CORDEX-FPS (Convection Permitting Models), CORDEX-LUCAS (Land Use and Climate Across Scales), EUROCORDEX, HIGHLANDER (EC). EUCP (European Climate Prediction System H2020), WEC (Climate Kic), NEXTDATA (FISR), Copernicus Climate Change Service C3S (ECMWF), GLORI4DE.

30/11/2015- 31/12/2021

Research Associate

CMCC Foundation - REgional Models and geo-Hydrological Impacts Division (REMHI)

Viale Thomas Alva Edison, Caserta (Italy)

Running of very high-resolution climate simulations (<3km) with the regional model COSMO CLM in the framework of international cooperation projects CORDEX-FPS (Convection Permitting Models), CORDEX-LUCAS (Land Use and Climate Across Scales), EUCP (European Climate Prediction System), WEC (Climate Kic), EUCP (H2020), NEXTDATA (FISR), Copernicus Climate Change Service C3S (ECMWF), HIGHLANDER (EC).

Testing, debugging and optimization of the TERRA-URB urban parameterization of the COSMO-CLM model

Development of post-processing algorithms of climate data NetCDF and Grib data management

Deputy coordinator of the Working Group SOILVEG (Soil and Vegetation) of CLM - Community (Climate Limited-area Modeling Community) from September 2017

01/04/2015 – 04/06/2015

V&V Engineering

ItalSystem s.r.l. - via A.Pini, Avellino (Italy)

Independent Verification & Validation to manage functional aspect of Aircraft Mission Management Computer according to RTCA/DO-178B Level B.

01/10/2014 – 31/03/2015

Research Fellowship at Electronic Systems & Communications Laboratory of CIRA

C.I.R.A. - Italian Aerospace Research Center, via Maiorise, Capua - Italy

Development of a feasibility study for a radio communication system between unmanned aircraft and air traffic operator in a non-segregated airspace.

01/2014 – 05/2014

Thesis - Training at the Laboratory S.U.M.A. of CIRA

C.I.R.A. - Italian Aerospace Research Center, via Maiorise, Capua - Italy

The activity concerns the development of a product to monitor atmospheric lightnings, from digital maps of Europe associated with a network of ground sensors to detect lightning strikes (Blitzortung).

Tools: Matlab, C#, ArcObjects, ArcGis, QuantumGis, Visual Studio 2010.

07/2011 – 11/2011

Thesis - Training at the Microwave Laboratory

University of Sannio, Benevento (Italy)

Studies of PBG (Photonic band gap materials): photonic crystals and quasicrystals.

Numerical simulations and analysis of the electromagnetic properties of octagonal photonic quasicrystals. Matlab, C

EDUCATION AND TRAINING

15/02/2016 – 23/02/2016

COSMO/CLM/ART Training Course

Das Bildungs- und Tagungszentrum (BTZ) DWD in Langen (Germany)

NWP (Numerical Weather Prediction) e RCM (Regional Climate Model) training course

11/2011 – 23/05/2014

Master's Degree in Electronic Engineering for Automation and Telecommunications

University of Sannio – Department of Engineering, Benevento - Italy

Thesis title: "Development of monitoring products for lightnings in a supporting aviation platform". Thesis subject: Remote sensing. Supervisor : Prof. Carmela Galdi

09/2008 – 10/11/2011

Bachelor's Degree in Telecommunications Engineering

University of Sannio – Faculty of Engineering, Benevento - Italy

Thesis title: "Resonant transmission through localized states in Photonic Quasicrystals"

Thesis subject: Electromagnetic Fields. Supervisor: Prof. Vincenzo Galdi

09/2003–06/2008

High School Diploma in Scientific Studies

"P.P. Parzanese", Ariano Irpino (Av) - Italy

PERSONAL SKILLS

Language skills

Mother tongue: Italian

Other languages: English, medium-high knowledge

Computer skills

Programming languages	Java, C, C#, SQL
Operating systems	Windows, Unix
Software	Matlab e Simulink, ArcGis ,software CAD/CAE, Quartus II, Visual Studio, Microsoft Office
Climate data managment	CDO (Climate Data Operators) NCO (netCDF Operators)
Licenses	Harmonized amateur examination certificates cept tr 61-02 (IZ8XTU)

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Caserta (CE) - Italy, 02/04/2025