PERSONAL INFORMATION

Andrea Valentini

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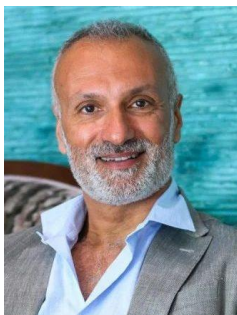
PROFILE

Head of the Marine and Coastal Numerical Forecasting Unit at the Hydro Meteo and Climate service of the Regional Agency for Prevention, Environment and Energy of the Emilia-Romagna region, with a strong background in ocean-coastal dynamics and modelling, climate change, observing systems and marine data analysis.

Project manager of several EU research and cooperation projects, mainly related to the climate change and adaptation plans for coastal areas, coastal risk assessment reduction and mitigation and to the management and the prevention of marine pollution.

Manager of the marine-coastal observation network of Emilia-Romagna.

Adjunct Professor of Advanced technologies and Decision Support Systems in water and coastal management at the University of Bologna - Department of Biological, Geological and Environmental Sciences.

Member of few national and international working group in the field of the ocean observing systems, bathing water quality management and short-term water pollution.

WORK EXPERIENCE

2019-Today

Hydro-Meteo-Climate Service of the Regional Agency for Prevention, Environment and Energy of Emilia-Romagna (Arpae-SIMC)

Head of the Marine and Coastal Numerical Forecasting Unit

- Coordination of the Unit and related staff, doctoral students and undergraduates
- Coordination of activities and initiatives in the marine-coastal sector at regional, national and international level also in relation to research projects
- Preparation and coordination of international project proposals, creation of partnerships
- Management of the Emilia-Romagna meteo-marine network
- Management, development and maintenance of operational marine models
- Management, development and maintenance of coastal forecasting modeling systems also in support of the coastal alert system
- Management and development of IT procedures related to modeling chains
- Support to the Civil Protection for hydrological and coastal risk prevention
- Member of few national and international working group
  - Member of the National Working Group appointed by the Ministry of the Environment for the technical-scientific assessments for the purpose of renewing the authorizations for discharge into the sea/reinjection of stratum waters of the offshore platforms of the company ENI S.p.A.
  - Arpae contact person for MONGOOS (Mediterranean Operational Network for the Global Ocean Observing System).
  - Member of the National Board of the Coastal Band of the Copernicus User Forum.
  - Member of the Regional Implementation and Monitoring Committee pursuant to art. 6 of the Program Agreement concerning the launch of an experiment aimed at defining the conditions for the preparation of an "alert protocol for the identification of short-term pollution phenomena along the coast of the Emilia-Romagna region".

Business or sector Public – Environmental Agency – Meteorological Service – Civil Protection's Functional Centre

2004-2018 Hydro-Meteo-Climate Service of the Regional Agency for Prevention, Environment and Energy of Emilia-Romagna (Arpae-SIMC)

Technician, level D2 (CCNL Sanità)

- Operational development and maintenance of marine-coastal forecasting modeling systems, Decision Support Systems (DSS) and Warning Systems (EWS) in support of:
    - the national and regional civil protection system
    - coastal zone management
    - control room activities
    - regional functional centre
- Technical management of the Emilia-Romagna wave buoy Nausicaa: maintenance, data flow control and their validation
- Marine-coastal modelling studies to support the regional and municipal management of bathing water quality
- Climatological and statistical studies for the definition of the hazard thresholds for coastal risk due to intense storm surges and for regional support to maritime and coastal spatial planning
- Drafting of guidelines and strategies for coastal risk management in collaboration with the regional and national Civil Protection system
- Management, coordination and development of project proposals and technical-scientific activities in the context of international projects in relation to marine and coastal issues
- Activities of the Civil Protection Functional Center of Emilia-Romagna carried out in the field of hydrological-hydraulic risk, in particular forecasting and monitoring of flood events
- Support and coordination of the activities of collaborators and graduate students in the field of marine-coastal modelling
- Workers' Safety Representative (RLS) from 2009 to 2013

Business or sector Public – Environmental Agency – Meteorological Service – Civil Protection's Functional Centre

2004-2007 INNOVA Srl

Management of European and National projects in the field of the technology transfer and valorisation

Business or sector Private consultant company

2004 Alfa, Ionio, Selectica centre of vocational training – Greece

Collaboration as a teacher for the realization of seminars titled "Facility Operating and Maintaining Technicians", funded by the European Social Fund and the Greek Ministry of Labour and Social Affairs.

- 30 hr - 03- 07 May 2004 - ALFA center of vocational training LTD (ALFA KEK), Nafpaktos (GR)
- 30 hr - 22-26 June 2004 - IONIO KEK, Zakynthos (GR)
- 30 hr - 28 June -2 July 2004 - SELEKTICA KEK, Karpenissi (GR)

Business or sector Professional training

2001-2004 University of Bologna and *Cassa di Risparmio di Bologna* Fundation

Development and management of the project "Il progetto Appennino" aimed at applying ICTs (Information and Communication Technologies) to open learning.

Business or sector Education

ACADEMIC ACTIVITY

2018-Today University of Bologna

Adjunct Professor of Advanced technologies and Decision Support Systems in water and coastal management (Department of Biological, Geological and Environmental Sciences).

- Course: Advanced technologies and Decision Support Systems in water and coastal management [cod. 88163] - Module 3. Teaching in English within the WACOMA curriculum (Water and Coastal Management) - Erasmus Mundus Joint Master Degree.
- Didactic commitment: 26 hours (2.00 ECM credits)

Business or sector Education

2018-Today	**University of Bologna** **Lecturer** of the specialized thematic course "Atmospheric and Ocean predictability - Sea-state and coastal predictions" within the research doctorate "PHD Future Earth, Climate Change and Societal Challenges" (35°, 36° e 37° cycle) Business or sector Education
2021-today	**University of Bologna** **Supervisor** of a research project in Coastal Physical Oceanography of the 36th cycle of the PhD "PHD Future Earth, Climate Change and Societal Challenges" of the University of Bologna ▪ PhD student: Emilia Rizzi ▪ Scholarship and PhD project topic: numerical coastal modeling and sediment transport Business or sector Education
2018-2021	**University of Bologna** **Supervisor** of a research project in Coastal Physical Oceanography of the 34th cycle of the PhD in Geophysics of the University of Bologna ▪ PhD student: Jacopo Alessandri ▪ Scholarship and PhD project topic: Coastal modelling studies for forecasting and remediation Business or sector Education
2020/21	**University of Bologna** **Co-Supervisor** of master's degree thesis in Environmental Analysis and Management - University of Bologna - Department of Biological, Geological and Environmental Sciences ▪ Title: Remediation strategies and management of oil spill hazard along the Emilia-Romagna coast (Italy) ▪ Student: Renan Gonçalves Menezes ▪ Supervisor: Dr. Beatrice Giambastiani (UNIBO) ▪ Co-supervisors: Dr. Andrea Valentini (Arpae) ▪ Co-Examiner: Dr. Lorenzo Mentaschi (UNIBO) Business or sector Education
2019/20	**University of Bologna** **Supervisor** of master's degree thesis in Environmental Analysis and Management - University of Bologna - Department of Biological, Geological and Environmental Sciences ▪ Title: Ensemble technique for a coastal Early Warning System (EWS): an application on the Emilia-Romagna Coast ▪ Student: Biolchi Luis Germano ▪ Supervisor: Dr. Andrea Valentini (Arpae) ▪ Co-supervisors: Dr. Beatrice Giambastiani (UNIBO) and Dr. Silvia Unguendoli (Arpae) ▪ Co-Examiner: Prof. Nadia Pinardi (UNIBO) Business or sector Education
2019/20	**University of Bologna** **Co-Supervisor** of master's degree thesis in Environmental Analysis and Management - University of Bologna - Department of Biological, Geological and Environmental Sciences ▪ Title: 2D modeling with Xbeach of a nourished area of Emilia Romagna ▪ Student: Labella Fonseca Heloisa ▪ Supervisor: Dr. Beatrice Giambastiani (UNIBO) ▪ Co-supervisors: Dr. Andrea Valentini (Arpae) and Dr. Silvia Unguendoli (Arpae) ▪ Co-Examiner: Prof. Claudia Romagnoli (UNIBO) Business or sector Education
2019/20	**University of Bologna** **Co-Examiner** of master's degree thesis in Environmental Analysis and Management - University of Bologna - Department of Biological, Geological and Environmental Sciences ▪ Title: oastal risk evolution due to wave actions under different climate change scenarios in Ria Formosa ▪ Student: Oo Mon Thet ▪ Supervisor: Prof. Theocharis Plomaritis (University of Cadiz) ▪ Co-supervisors: Prof. Oscar Ferreira (University of Algarve) ▪ Co-Examiner: ProfDr. Andrea Valentini (Arpae) Business or sector Education

2002-2003	**University of Bologna**

Tutoring activity for the course: Mechanical of Underground Fluids (Prof. Paolo Macini) of the degree in Environmental Engineering.

Business or sector Education

EDUCATION

2001-2004	**Ph.D. in "Automatic Control and Operations Research"**

University of Bologna, Italy.

Ph.D. in the field of control and modeling of environmental systems. Carried out at the DEIS (Department of Electronics, Informatics and Systems)
Thesis: Dynamic models for the simulation of a water body - The Comacchio Lagoon -

2002	**Post-degree specialization course "Dynamic System Identification"**

University of Bologna, Italy.

Analysis and study of the most used techniques for the identification of dynamic systems.

1992-2000	**Degree/MSc in "Environmental Engineering"**

University of Bologna, Italy.

5 years - Score 100/100 with Honors
Thesis: Implementation of a FORTRAN code for the computer simulation of anossia phenomena in Comacchio Lagoon

1985-1990	**Diploma of Technician in Industrial Electronics**

Industrial Technical Institute "O. Belluzzi" of Bologna (Italy)

Diploma of Technician in Industrial Electronics (experimental AMBRA: Electronics, Systems and Telecommunications) – Score 60/60

2001 PROFESSIONAL QUALIFICATION	**Qualification to practice the profession of engineer**

Industrial First session of 2001

PERSONAL SKILLS

Mother tongue Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English C1	C2	C1	C1	C1
2000 First Certificate in English - University of Cambridge				
German A2	A2	A2	A2	A2
2014 A2 certificate (Start Deutsch 2) - Goethe Instituts 2012 A1 certificate (Start Deutsch 1) - Goethe Instituts				

Communication skills I can relate to people of different nationalities and cultures thanks to the experience acquired during the many international projects I have worked on and the university experience. I'm also able to communicate clearly and precisely, responding with accuracy and punctuality to the performance of the activities and responsibilities entrusted. The attention and excellent listening skills allow me to analyze collective work contexts, managing to cope promptly with emergencies and critical issues:

Organisational / managerial / job-related skills In the framework of the various professional experiences listed above, I have developed the ability to independently organize and plan work and manage the activities of a group, clearly defining

priorities and assuming responsibilities, respecting and enhancing the professionalism of others.

Excellent skills in managing work processes in compliance with the deadlines and set objectives, thanks to the precision, reliability and punctuality that distinguish me.

I am able to work in stressful situations thanks to the ability to analyze and identify the most effective solutions to the problem, skills and competences acquired both from engineering training and through the management of relationships with multiple interlocutors, and matured in the various professional experiences.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Operating Systems: Linux, DOS and Windows, knowledge of Macintosh systems.

Word processing and Office tools.

Languages: Matlab, R, shell-scripting, Fortran, Python, C

Other skills

Since childhood I have practiced sports, especially team sports that have allowed me to acquire dedication, team spirit, determination, punctuality and techniques for managing stress.

I also attended courses aimed at personal knowledge, the management of emotions and problem solving that allowed me to acquire awareness and precision in the management of emotions and relationships.

Driving licence

Driving license (license A and B) and a sailing and motor license over 12 miles.

ANNEXES FOR EVALUATION

1_Cover_letter_DCC-CR_Valentini.pdf

2_Certificates_DCC-CR_Valentini.pdf

3_Responsibilities_DCC-CR_Valentini.pdf

4_Publications_DCC-CR_Valentini.pdf

5_Projects_DCC-CR_Valentini.pdf

6_Presentations_DCC-CR_Valentini.pdf

7_Courses_DCC-CR_Valentini.pdf

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.

Bologna, January 6, 2023   Andrea Valentini