

Europass Curriculum Vitae

Personal information

Surname(s) / First name(s)

Email(s)

Nationality(-ies)

Cerrai, Diego

diego.cerrai@uconn.edu;

Italian

Desired employment/ Occupational field

Forecaster, Modeler

Meteorology, Hydrology, Climatology, Data Mining, Outage Prediction

Education and training

Dates

08/2015 - current

Title of qualification awarded

Ph.D. Candidate in Environmental Engineering

Principal subjects/Occupational skills covered

Hydrology, Climatology, Statistics, Environmental Chemistry, Data Mining, Remote Sensing, Transport in soil, water and atmosphere

Name and type of organization providing education and training

University of Connecticut

Dates

09/2012 - 06/2015

Title of qualification awarded

Master in Physics of the Earth System

Title of thesis

Moisture and potential vorticity in medicanes: theoretical approach and case studies

Principal subjects/Occupational skills covered

Physics and Chemistry of the Atmosphere, Climatology, Geophysics, Hydrology, Oceanography, Physics of Clouds, Radiative Transfer, Dynamic and Synoptic Meteorology

Name and type of organization providing education and training

University of Bologna

Dates

02/2015, 9-13

Title of qualification awarded

Course on Probability and uncertainty: two concepts to be expanded in meteorology. Certificate of attendance

Name and type of organization providing education and training

ARPA-SIMC, Bologna

Dates

09/2008 - 10/2012

Title of qualification awarded

Bachelor in Physics

Title of thesis

Realization of a hot-wire anemometer for measuring the velocity profile of a fluid

Principal subjects/Occupational skills covered

Physics, Chemistry, Mathematics, Informatics

Name and type of organization providing education and training

University of Pisa

Work experience

Dates	08/2015 - Present
Work	Research Assistant
Description	Responsible for the University of Connecticut Outage Prediction Model (UConn OPM) research and development (R&D)
Occupational skills covered	Predictive Analytics, Data Assimilation, Data Mining, Operational System Development
Name and type of organization	Eversource Energy Center, University of Connecticut

Scientific publications in international journals

Description	<p>Cioni, G., Cerrai, D., and Klocke, D., 2018. Investigating the predictability of a Mediterranean Tropical-like Cyclone using a storm-resolving model. <i>Q. J. Royal Meteorol. Soc.</i> 144 (714), 1598-1610.</p> <p>Wanik, D.W., E.N. Anagnostou, M. Astitha, B.M. Hartman, G.M. Lackmann, J. Yang, D. Cerrai, J. He, and M.E. Frediani, 2018: A Case Study on Power Outage Impacts from Future Hurricane Sandy Scenarios, <i>J. Appl. Meteor. Climatol.</i>, 57 (1), 51-79.</p> <p>Miglietta, M. M., D. Cerrai, S. Laviola, E. Cattani, and V. Levizzani, 2017: Potential vorticity patterns in Mediterranean "hurricanes", <i>Geophys. Res. Lett.</i>, 44, 2537-2545, doi:10.1002/2017GL072670.</p>
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Scientific Committee Assignments

Technical Committee	American Geophysical Union (AGU) Hydrology - Precipitation Technical Committee
Reviewer for	Advances in Meteorology Atmospheric Research

Awards

Atmospheric Research: Certificate of Outstanding Contribution in Reviewing, 2017

Department of Environmental Engineering, UConn: Pre-Doctoral Fellowship Award, Fall 2017

Personal skills and competences

Mother tongue(s)

Other language(s)

*Self-assessment
European level^(*)*

English

Italian

English, German

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1	C2	C1	C1	C1

German

A2	A2	A1	A1	A2
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(*) Common European Framework of Reference (CEF) level

Social skills and competences

natural attitude to work as a team member

Organisational skills and competences

prioritizing (organization of work tasks providing different levels of priority);
have full control of work and targets

Technical skills and competences

experience in weather modelling, outage prediction, remote sensing, handling large datasets, graphical visualisations

Computer skills and competences

good knowledge and skills of MATLAB and R, used to create new operational predictive frameworks and to develop new techniques to visualize model outputs
knowledge of GrADS, C++, TINA-TI, LabVIEW
knowledge of scripting languages (Unix) and word processors (Microsoft Office, L^AT_EX)
basic level use of IDL, Fortran, ArcGIS

Additional information**Conferences**

Cioni, G., Cerrai, D., Ricchi, A., Anagnostou, E., Nikolopoulos, E., Carniel, S., Bonaldo D., and Borga, M.: Investigating the predictability of a Mediterranean Tropical-like Cyclone using a non-hydrostatic high-resolution model. *EGU General Assembly 2018*, Vienna, 8 - 13 Apr.

Cioni, G., Cerrai, D., and Klocke, D.: Investigating the predictability of a Mediterranean Tropical-like Cyclone using a non-hydrostatic high-resolution model. *EGU General Assembly 2018*, Vienna, 8 - 13 Apr.

Cerrai D., E. N. Anagnostou, J. Yang, M. Astitha: Predicting Power Outages Using Multi-Model Ensemble Forecasts. *American Geophysical Union, Fall General Assembly 2017*, New Orleans (LA), 11 - 15 Dec.

Cerrai D., E. N. Anagnostou, D. W. Wanik, M. A. E. Bhuiyan, X. Zhang, J. Yang, M. Astitha, M. E. Frediani, C. S. Schwartz, M. Pardakhti: Enhanced outage prediction modeling for strong extratropical storms and hurricanes in the Northeastern United States. *American Geophysical Union, Fall General Assembly 2016*, San Francisco (CA), 12 - 16 Dec.

Laviola S., M. M. Miglietta, D. Cerrai, E. Cattani, V. Levizzani, 2016: Potential vorticity patterns in Mediterranean hurricanes. *EGU General Assembly 2016*, Vienna, 17 - 22 Apr.

Miglietta, M. M., D. Cerrai, S. Laviola, E. Cattani, V. Levizzani, W. Kim, S. K. Park, C. Cassardo, A. Ricchi, and S. Carniel, 2015: Analysis of an intense tropical-like cyclone over the western Mediterranean Sea through a combined modeling and satellite approach. *ECSS2015*, Wiener Neustadt, 14-18 Sept.

Levizzani, V., M. M. Miglietta, D. Cerrai, S. Laviola, E. Cattani, W. Kim, S. K. Park, C. Cassardo, A. Ricchi, S. Carniel, 2015: Analysis of an intense tropical-like cyclone over the western Mediterranean Sea through a combined modeling and satellite approach. *Taipei Severe Weather and Extreme Precipitation 2015*, Taipei, 25 - 27 May.