Maria Laura Poletti

PERSONAL INFORMATION

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Sex F | Date of birth 10/07/1991 | Nationality Italian

PREFERRED JOB STUDIES APPLIED FOR

Hydrologist, researcher in Hydrology and nowcasting radar based technique, early warning systems and flood hazard prevention

WORK EXPERIENCE

AUGUST 2019-up to now

Researcher at CIMA Research Foundation
Cima Research Foundation, Via Magliotto 2, Savona, Italy
Research above rainfall nowcasting technique, hydrological nowcasting, early warning systems, flood forecasting. Activities of support in the real time natural hazards monitoring, forecasting and prevention system. Involvement in projects for training above operational tools for risk management both at European and at global scale.

SEPTEMBER 2016- up to now

Activity of teaching support for Fluid Mechanics course
University of the study of Genova, DIME department, Via Montallegro 1
Class lectures, exercises explanation, tests and final exams preparation and correction

MARCH 2016 – up to now

Situation room operator
Cima Research Foundation, Via Magliotto 2, Savona, Italy
Monitoring of the observation italian network and of the products furnished by CIMA Foundation for the Civil Protection Department.

MARCH – SEPTEMBER 2016

Operator for yellow alert monitoring
CFMI-PC Arpal Liguria Region, Viale Brigate Partigiane 2, Genova, Italy
Monitoring of real-time observations and meteo-hydrological chain output of CFMI-PC of Liguria Region during yellow alert.

MARCH-OCTOBER 2015

Traineeship aimed at master thesis preparation
CFMI-PC Arpal Liguria Region, Viale Brigate Partigiane 2, Genova, Italy
Research analysis of an operational tool used for the forecast of thunderstorm in the meteo-hydrological chain of ARPAL.

MARCH-OCTOBER 2013

Traineeship aimed at bachelor thesis preparation
CFMI-PC Arpal Liguria Region, Viale Brigate Partigiane 2, Genova, Italy
Study on a expeditious procedure for the estimation of the discharge in little catchments of Liguria region and calibration of an hydrological model used by the CFMI-PC.

EDUCATION AND TRAINING

NOVEMBER 2018-JULY 2019

Research grant at CIMA Research Foundation
University of Genoa and CIMA Research Foundation
Hydrological nowcasting, radar based nowcasting technique, hydrological models, flood forecast, real time applications

NOVEMBER 2015- NOVEMBER 2018	**PhD in Computer Science and System Engineering curriculum System Engineering**
	University of Genoa and CIMA Research Foundation
	Hydrological nowcasting, radar based nowcasting technique, hydrological models, flood forecast, real time applications

OCTOBER 2013 – OCTOBER 2015	**Master Degree in Environmental and Energy Engineering (107/110)**
	University of Genoa
	Learning and deepening of subject of environmental and energetic interest.

SEPTEMBER 2010 – OCTOBER 2013	**Bachelor degree in Environmental Engineering (107/110)**
	University of Genoa
	Learning of subjects common in all the engineering fields. Deepening of subjects characterizing the civil-environmental engineering.

PERSONAL SKILLS

Mother tongue Italian

Other language

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English				
B2	C1	B2	B2	B2
First Certificate B2				
Spanish				
B1	B2	B1	B1	B1
Portuguese				
A2	A2	A2	A2	A2
Certificate A2 issued by Instituto Camões da Cooperação e da Língua				

Communication skills Good communication skills gained through years of university studies and in the years of PhD

Organisational / managerial skills Excellent organisational skills developed in years of managing of volunteering activity with children and teenagers with the Community of Sant'Egidio carried on since 2008).

Job-related skills Very good skills in team working developed along the university studies and during the PhD

Digital competence

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

Deep knowledge of the instruments of the "Microsoft Office" package. Good ability to use Matlab software, basis knowledge of the software QGIS and of the programming language in Linux environment. Proficient user of the e-learning platform Moodle for courses creation and management of students and learning activities; use of supporting software for learning and interactive sessions such as Miro board and Wooclap.

Driving licence Driving license cat. B

ADDITIONAL INFORMATION

Publications

- Poletti, M. L., Parodi, A., & Turato, B. (2017). Severe hydrometeorological events in L iguria region: calibration and validation of a meteorological indices-based forecasting operational tool. *Meteorological Applications*, *24*(4), 560-570.

- Poletti, M. L., Silvestro, F., Davolio, S., Pignone, F., & Rebora, N. (2019). Using nowcasting technique and data assimilation in a meteorological model to improve very short range hydrological forecasts. *Hydrology & Earth System Sciences*, *23*(9).

- Corral, C., Berenguer, M., Sempere-Torres, D., Poletti, L., Silvestro, F., & Rebora, N. (2019). Comparison of two early warning systems for regional flash flood hazard forecasting. *Journal of hydrology*, *572*, 603-619.

- Lagasio, M., Campo, L., Milelli, M., Mazzarella, V., Poletti, M. L., Silvestro, F., ... & Parodi, A. (2022). SWING, The Score-Weighted Improved NowcastinG Algorithm: Description and Application. *Water*, 14(13), 2131.

Projects

- **ANYWHERE** (EnhANcing emergencY management and response to extreme WeatHER and climate Events) is designed to improve emergency management and to respond to extreme or high-impact weather events such as floods, landslides, storms, heavy snowfalls, forest fires, heat waves and droughts.
- **IO NON RISCHIO**: communication campaign of the Italian Civil Protection Department in which CIMA 's role ranges from the training of volunteers, to support during events in the squares to the activity of real coordination of the campaign itself.
- **PROTERINA-3 ÉVOLUTION:** for the Reduction of flood risk and creation of the resilience of the territories through structural and technological measures, but also thanks to participatory paths with the population.
- **Bolivia FAO:** project funded by the Italian Cooperation and managed by Bolivia's FAO division with the aim of implementing an Early Warning System at national level.
- **WIRWINA**: project aimed at building resilience to face hydro-metereological hazards in Bolivia, Peru and Paraguay
- **ARISTOTLE-ENHSP** (All Risk Integrated System TOwards Trans-boundary hoListic Early-warning - European Natural Hazards Scientific Partnership): aimed to offer the European Emergency Response Coordination Centre (ERCC) a service system for hazard-related natural phenomena.
- **MAYO-UP**: for the development of resilience of the vulnerable population living in the slum area of Mayo, Khartoum, Sudan; project with AICS.
- **PPRD-SOUTH:** the project is aimed to increasing resilience and reducing the social, economic and environmental costs of natural and man-made disasters in the ENP South region (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia).
- **IGAD-AUC***, Programme for a continental coordination, early warning and action system in Africa; project in collaboration with UNDRR-AUC.
- **MOZAMBIQUE,** Building inclusive resilient communities and schools to face rapid-onset hazards in risk-prone areas in Mozambique affected by cyclone Idai, linking early warning to early action; project with WW-GVC.
- **NEPTUNE,** (Nowcasting and impact-basEd PredicTions of inUndations in mediterraNean catchmEnts) project is dedicated to the creation of flood forecasting tools to strengthen risk management in the Italy-France cross-border area and more generally in the Mediterranean region.
- **HSAF,** project in collaboration with EuMetSat aimed at creating satellite products for hydrological applications and testing their functioning.

Participation to:

Conferences

- 15th Plinius Conference on Mediterranean Risks, Giardini Naxos, Italy, 8-11 June 2016
- Giornate dell'Idrologia 2017, Favignana, Italy, 21-24 June 2017
- European Geoscience Union (EGU) General Assembly 2017, Wien, 23–28 April 2017
- International Conference on Urban Drainage (ICUD) 2017, Prague, 10-15 September 2017
- European Geoscience Union (EGU) General Assembly 2018, Wien, 8–13 April 2018
- ERAD, European Radar Conference 2018, Wageningen 1-6 July 2018
- 16th Plinius Conference on Mediterranean Risks, Montpellier, 9-11 October 2018
- European Geoscience Union (EGU) General Assembly 2019, Wien, 8–12 April 2019
- European Nowcasting Conference (ENC) 2019, Madrid, 24–26 April 2019
- RadMet2019, Torino, Italy, 3–4 July 2019
- RadMet2021, Firenze, Italy, 6-8 July 2021 (online conference)
- European Geoscience Union (EGU) General Assembly 2022, Wien, 23–27 May 2022
- ERAD, European Radar Conference 2022, Locarno 29 August – 1 September 2022
- RadMet2023, Bologna, Italy, 5–7 July 2023