

**PERSONAL INFORMATION****Valerio Basso**

 Via Armando Magliotto 2, 17100 Savona (Italy)

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 valerio.basso@cimafoundation.org

Date of birth 12/11/1985 | Nationality Italian

**PERSONAL STATEMENT**

Environmental Engineer with a strong motivation in the field of hydrology and hydraulic modeling

**WORK EXPERIENCE**

02/2017–Present

**Research fellow**

University of Genoa

Via Balbi 5, 16126 Genova (Italy)

<https://unige.it/>

Testing and improving the performances of the Continuum hydrological model (<http://continuum.cimafoundation.org/>) for the national and international river basins with the aim of achieving more accurate flood and drought estimations. The main activities are:

- calibration of the model in climatologically and morphologically different territories;
- enhance the accuracy of the mass and energy balance transfer scheme at the soil-vegetation-atmosphere interfaces;
- coupling of the Continuum model with a FAO specific algorithm to determine the irrigation demand in many different kinds of agricultural fields.

09/2014–Present

**Hydro-Meteorological Monitoring Operator**

CIMA Research Foundation

Via Magliotto 2, 17100 Savona (Italy)

<http://www.cimafoundation.org/>

providing support to the Italian Civil Protection Department by monitoring the correct functioning of the hydro-meteorological observational networks and models active for the national territory (a weekly shift every 3/4 months)

06/2011–08/2013

**Environmental Engineer**

ambiente s.c.

Via Frassina 21, 54031 Carrara (Italy)

<http://www.ambientesc.it/>

- Air quality monitoring studies and field surveys (with dedicated mobile stations) for the characterization of the state of air quality before, during and after the realization of infrastructures.
- Development of a new strategy for improving the actual air quality monitoring network in Malta (EU-funded project).
- Environmental Impact Assessment studies for new infrastructures (roads and railways).

**EDUCATION AND TRAINING**

01/2014–12/2016

**PhD in Systems Engineering – curriculum in Systems Monitoring**

University of Genova, Genova (Italy)

The PhD research objective was aimed at investigating the role of vegetation dynamic, monitored by satellite sensors, on the water and energy balance at the small-medium catchment scale using

Continuum, a physically-based and distributed hydrological model - PhD thesis title: "Impacts of the EO-based representation of vegetation dynamics on continuous basin scale hydrological models"

▪ Additional activity: perform hydraulic simulations using the TELEMAC-2D model

- 09/2007–12/2010 **Master of Science in Environmental Engineering - specialization in Environmental and Industrial Risks Management**  
University of Genova, Genova (Italy)  
Final grade: 110 / 110 cum laude  
Thesis title: "Analysis of the potentiality of the satellite observations for the estimation of ecohydrological parameters".
- 09/2009–06/2010 **Master of Science in Environmental Engineering**  
Polytechnic Institute of New York University, New York (United States)  
Final grade: 4.0 / 4.0 GPA  
Final project title: "Groundwater flow study on a Western Long Island aquifer model".
- 09/2004–12/2007 **Bachelor of Science in Environmental Engineering**  
University of Genova, Genova (Italy)  
Final grade: 106 / 110  
Thesis title: "Hyperspectral image classification: application of feature extraction approaches" (in collaboration with University of Genova and Vrije Universiteit Brussel)
- 02/2007–07/2007 **Erasmus Student Program**  
Vrije Universiteit of Brussel, Brussel (Belgium)

#### PERSONAL SKILLS

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Mother tongue(s) Italian

Other language(s)

English	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
	B2	C1	B1	B1	B1
TOEFL Grade: 88/120 Date: 06/2008 Issued by: Educational Testing Service					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

Communication skills

good communication skills gained through my student experiences abroad where I interacted with many people coming from different regions of the world.

Digital skills

	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem solving
	Proficient user	Proficient user	Basic user	Independent user	Proficient user
<u>Digital skills - Self-assessment grid</u>					

- very good command of Python, Fortran ,Qgis, Matlab;

- good command of office or equivalent suit;

- Other skills**
- semi-professional football player between 2003 and 2005
  - scuba diver (PADI- open water diver certificate)
  - wine and olive grower

**Driving licence**

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## ADDITIONAL INFORMATION

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- Conferences**
- Phenology Conference 2015. 'Challenges in Phenology'. Kusadasi (Turkey) 5-8 October 2015.
  - EUMETSAT Land Surface Analysis Satellite Application Facility (LSA SAF) – 2015 User Workshop. Reading (United Kingdom) 8-10 June 2015.
- Honours and awards**
- Polytechnic Institute of NYU scholarship for Fall and Spring Semesters (2009/2010)
  - H2CU (Honors Center of Italian University) scholarship for funding Master at Polytechnic Institute of NYU (2009/2010)
  - University of Genova scholarship for Erasmus student program (2007)
- Certifications**
- Professional Engineer in Civil and Environmental Engineering (section A - Italy) Date:07/2011
- Courses**
- Alpine Summer School on "*Dynamics, Stochastics and Predictability of the Climate System*" 9-18 June 2014 in Valle d'Aosta (Italy)
  - DRIHM Summer School on "Hydro-meteorological modelling using e-Science environments" 22-25 September 2014 in Madrid