curriculum vitae

PERSONAL INFORMATION

Surname	**Gazzotti**
Name	**Paolo**
Address	**Via S. Pellico 3, 21100, Varese, ITALY**
Telephone	
E-mail	**paolo.gazzotti@cmcc.it**
	paolo.gazzotti@polimi.com
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Skype/Twitter	**@gappix**
Nationality	Italian
Date of birth	26 December 1990

Education and training

• Date (from – to)	11/2017 – 09/2021
• Title of qualification	PhD in Management Engineering
• Name and type of organisation providing education and training	Politecnico di Milano
• Duration of the program of study	3 years
• Principal subjects/occupational skills covered	Climate Change, Multiagent Negotiations and International Environmental Agreements, Game Theory, Policy Discovering, Benefit-Cost Analysis

• Date (from – to)	09/2012 – 12/2015
• Title of qualification awarded	Master Degree in Computer Science Engineering
• Name and type of organisation providing education and training	Politecnico di Milano
Duration of the program of study	2 years
• Principal subjects/occupational skills covered	Multiagent Systems, Artificial Intelligence, Data Mining, Dynamic control, Complex Systems
Final mark obtained	109/110

• Date (from – to)	09/2009 – 07/2012
• Title of qualification awarded	Bachelor Degree in Computer Science Engineering
• Name and type of organisation providing education and training	Politecnico di Milano
• Duration of the program of study	3 years
• Principal subjects/occupational skills covered	Computer science, engineering topics
Final mark obtained	96/110

• Date (from – to)	09/2004 – 07/2009
• Title of qualification awarded	High School graduation
• Name and type of organisation providing education and training	Liceo Scientifico G.Ferraris
• Duration of the program of study	5 years
• Principal subjects/occupational skills covered	Science basics
Final mark obtained	93/100

PhD thesis

Title	A multi-agent approach for climate change negotiations
Language	English
Supervisor	Prof. M. Tavoni
Co-supervisor	Prof. A. Castelletti
Thesis Summary	The high level of heterogeneity and uncertainty of climate change impacts hampers the proper evaluation of the best policies and mitigation strategies to be implemented by the different nations. Moreover, regional inequality further exacerbates the international negotiation and coordination process on emissions regulation.
	This doctoral dissertation first contributes to the advancing of regional calibration in benefit-cost Integrated Assessment Models. It adopts the most recent scientific empirical contributions as sources of heterogeneity of climate change impacts and mitigation costs. Then, it discusses new assessments on optimal mitigation-policy responses, principally focusing on the inequality implications across regions. Last, it formalizes a novel agent-based negotiation framework as a flexible approach to account for the different perceptions and decision forces in international climate negotiations.

Master Graduation thesis

Title	Negoziazione in Sistemi Multiagente per l'Identificazione di Politiche di Regolazione di Bacini Idrici
Language	Italian
Supervisor	Prof. F. Amigoni
Thesis Summary	Water reservoir management is a complex multiobjective problem, because of the involvement of many, often conflicting, interests. Among the approaches proposed for modelling and solving the problem, increasing attention has been recently devoted to those based on multiagent systems, in which the stakeholders are represented by different agents. In this thesis, we've defined a cooperative negotiation protocol in order to identify operation policies as agreements between all interests involved and to provide a basin management model. Our approach, based on monotonic concession, keeps agents' preferences and strategies private and guarantees convergence property and Pareto optimal agreements. The proposed model has been applied to a simplified case study and simulated under several conditions, showing adaptivity to water resources systems behaviours and good performance.

Publications and articles

Author(s) and title	Gazzotti, P., Emmerling, J., Marangoni, G., Castelletti A., van der Wijst, K.I., Hof, A., Tavoni, M. (2021) Persistent inequality in economically optimal climate policies.
Language	English
Publication place	Nature Communications 12, 3421
Date of publication	08 June 2021

Author(s) and title	Amigoni F., Castelletti A., Gazzotti P., Giuliani M., Mason E. (2016) Using Multiagent Negotiation to Model Water Resources Systems Operations
Language	English
Publication place	Autonomous Agents and Multiagent Systems: AAMAS 2016 Workshops, Best Papers, Singapore, Singapore, May 9-10, 2016, Revised Selected Papers, pp 51 - 72
Date of publication	24 September 2016

Author(s) and title	Amigoni F., Castelletti A., Gazzotti P., Giuliani M., Mason E. (2016) Water Resources Systems Operations via Multiagent Negotiation: (Extended Abstract).
Language	English
Publication place	Proceedings of the 2016 International Conference on Autonomous Agents & Multiagent Systems (AAMAS '16), pp 1379 -1380
Date of publication	09 May 2016

Awards

04/2016	The paper "Using Multiagent Negotiation to Model Water Resources Systems Operations" has been selected by the IDEAS Organizing Committee and the AAMAS Workshop Chairs for the IDEAS 2016 Best Paper Award.

Work experience, stages, studies abroad

• Date (from – to)	**02/2019 – Current**
• Name and address of firm/university	RFF-CMCC European Institute on Economics and the Environment Via Bergognone, 34 Milano (MI) – Italy.
• Type of employment	Affiliated scientist
• Main activities	Benefit-cost analysis with Integrated Assessment Models. Agent-based modelling. Evolutionary algorithms application.

• Date (from – to)	**11/2019 – 04/2020**
• Name and address of firm/university	PBL Netherlands Environmental Assessment Agency Bezuidenhoutseweg 30, The Hague (NL).
• Type of employment	Guest Researcher
• Main activities	Progressing and finalizing my PhD research, benefiting from local scientists and policy experts.

• Date (from – to)	**03/2016 – 10/2017**
• Name and address of firm/university	Reti S.p.a Via Dante 6, Busto Arsizio (VA), Italy
• Type of business or sector	Business and IT Consultant
• Type of employment	Full-time employee
• Main activities and responsibilities	Since the beginning, I've been involved in an internal innovation project aiming at exploring Big Data and Data Science solutions to let the firm acquire new knowledge and skills in this trending topic. I've attended some business conferences and partner events showing some self-implemented prototypes. I worked on a couple of Business Intelligence (Qlik View data engineering) and basic Machine-Learning projects, in partnership with Microsoft. I developed also an Android application within a structured team project for an assurance company.

Certifications

Certifications of language knowledge	FCE – Grade B, on 30 April 2012

Personal skills and competences
Acquired in the course of life and career but not necessarily evidenced by formal certificates and diplomas.

Mother tongue	**Italian**

Other language(s)

English

• reading	Professional
• writing	Professional
• speaking	Professional

Social skills and competences
Living and working with other people, in multicultural environments, in positions where communication is important and

Since 2009 I collaborate with F.O.M. (Fondazione Oratori Milanesi, Diocesi di Milano) on preparing and conducting educational activities, residential courses and large events involving hundreds of young people around Milan. Thanks to these experiences, I've progressively acquired solid relational, managing, and communicational abilities. Appraised soft skills like

situations where teamwork is essential (e.g. Culture and sports), etc.

team-working, public speaking, group managing and responsibility-taking, are often essential in those activities.

Moreover, I am constantly directly involved in several other volunteering activities. In particular, I support and contribute to the educational activities targeting teenage people facing the difficult, yet exciting challenges correlated to that age.

I love practising sport, both for recreational and competitive purposes. I had been an archer for eight years, also achieving important and satisfactory -both individual and team- prizes. Then, I started basketball in 2009. I'm still playing it in an amateur local team with a renewed ambition.

Organisational skills and competences
E.g. coordination and management of people, projects and budgets; at work, in voluntary work (e.g. culture and sports) and at home, etc.

In my work and research activities, I use to spend an adequate amount of time in rigorous task-planning, by defining new horizons and discussing promising future steps with colleagues.

In my volunteering activities, I often take managing and team coordination responsibilities. For five years I've been elected as a council member for the local church community and I'm still cooperating with some related activity groups.

From 2014 to 2018 I was the executive manager of the basketball team where I play.

Technical skills and competences
With computers, specific kinds of equipment, machinery, etc.

Programming languages: *C, Java, SQL, Scala, Python, R, GAMS, C#*
Software, Environments, and IDEs: *Hadoop, Spark, Matlab, Unity3D, LaTeX, R-Studio, Azure ML Studio, IntelliJ, Eclipse, Android Studio, Qlik View, Power BI, MS Office*
OS: *Windows, Mac OSX, Linux*

Artistic skills and competences
Music, writing, drawing etc.

I really love music and, after years of mixing private lessons and self-training, I have become quite good at playing the piano and acoustic guitar. Recently I am curiously exploring and practicing new music instruments like the ukulele, cajon, panpipe and electric guitar.

Since childhood, I am fond of astronomy, with occasional amateur sky observations, and hobby modelling, with several in-scale reproductions of complex buildings.

Recently I've been growing a thrilling interest in photography and video making by planning, recording, and editing some short movies. I'm continuously trying to improve my skills and outputs-quality in every activity I get involved in.