Aurora Gullotta

Nationality: Italian **Date of birth:** 06/01/1992 **Phone number:** (+39) 3895530721

Email address: aurora.gullotta@unict.it **Email address:** aurora.gullotta@ingpec.eu **Skype:** agullotta92

LinkedIn: https://www.linkedin.com/in/aurora-gullotta-082917154/

Website: https://www.scopus.com/authid/detail.uri?authorId=57208228830

Work: Viale Andrea Doria, 6, 95125 Catania (Italy)

ACADEMIC EXPERIENCE

Assistant Professor of of Hydraulic and Maritime Constructions and Hydrology

[01/2022 – Current]

Lecturer of Hydrology - Department of Civil Engineering and Architecture - University of Catania

Teaching training

[2017 – 2018]

Collaboration in teaching activities of the following course:

- Watershed Hydraulic Protection - Prof. Alberto Campisano - Department of Civil Engineering and Architecture - University of Catania
- Hydrology - Prof. Carlo Modica - Department of Civil Engineering and Architecture - University of Catania

Co-Supervision of thesis (for M.S. students) in the fields of hydrology and hydraulic constructions

Peer Review

[2017 – Current]

Reviewer for several journals in the fields of hydraulic infrastructures and hydrology (Urban Water Journal, Water, AQUA - Water Infrastructure, Ecosystems and Society, Journal of Water Resources Planning and Management, Water Resources Management, Water Resources Research)

EDUCATION AND TRAINING

PhD in Evaluation and Mitigation of urban and land risks

Department of Civil Engineering and Architecture - University of Catania [10/2017 – 10/2020]

City: Catania

Country: Italy

Thesis: "Intermittent Water Distribution Systems: monitoring, modelling and improving equity among users"

Research group: Prof. Alberto Campisano, Prof. Carlo Modica, Prof. Enrico Creaco

Visiting PhD Student

Centre for Water Systems (CWS) - University of Exeter [03/2019 – 02/2020]

City: Exeter

Country: United Kingdom

Reasearch group: Prof. David Butler, Prof. Raziyeh Farmani

Master Degree in Land and Enviromental Engineering

Department of Civil Engineering and Architecture - University of Catania [10/2014 – 03/2017]

City: Catania

Country: Italy

Final grade: summa cum laude

Bachelor Degree in Civil and Enviromental Engineering

Department of Civil Engineering and Architecture - University of Catania [10/2010 – 03/2014]

City: Catania

Country: Italy
Final grade: summa cum laude

PUBLICATIONS

Campisano, A., Gullotta, A., and Modica, C. (2023). "An Expeditious Campaign of Field Experiments for Preliminary Analysis of the Hydraulic Behavior of Intermittent Water Distribution Networks". Water 15(6):1102. https://doi.org/10.3390/w15061102

[2023]

Gullotta, A., Aschale, T.M., Peres, D.J., Sciuto, G., and Cancelliere A. (2023). "Modelling Stormwater Runoff Changes Induced by Ground-Mounted Photovoltaic Solar Parks: A Conceptualization in EPA-SWMM". Water Resour Manage 37, 4507–4520. https://doi.org/10.1007/s11269-023-03572-3

[2023]

Aschale, T.M., Peres, D.J., Gullotta, A., Sciuto, G., Cancelliere, A. (2023). "Trend Analysis and Identification of the Meteorological Factors Influencing Reference Evapotranspiration". Water 15(3):470. https://doi.org/10.3390/w15030470

[2023]

Campisano, A., Creaco, E., Gullotta, A., Modica, C., and Musmeci, F. (2022). "Modelling hydrological response of modular blue roofs for storm water control in a Mediterranean site". Urban Water Journal, 19(10), 1015-1024, DOI: 10.1080/1573062X.2022.2134807

[2022]

Aschale, T.M., Sciuto, G., Peres, D.J., Gullotta, A., and Cancelliere, A. (2022). "Evaluation of Reference Evapotranspiration Estimation Methods for the Assessment of Hydrological Impacts of Photovoltaic Power Plants in Mediterranean Climates". Water 14(14):2268. https://doi.org/10.3390/w14142268

[2022]

Gullotta, A., Butler, D., Campisano, A., Creaco, E., Farmani, R., & Modica, C. (2021). Optimal Location of Valves to Improve Equity in Intermittent Water Distribution Systems. Journal of Water Resources Planning and Management, 147(5), 04021016. https://doi.org/10.1061/(asce)wr.1943-5452.0001370

[2021]

Gullotta, A., Campisano, A., Creaco, E., & Modica, C. (2021). A Simplified Methodology for Optimal Location and Setting of Valves to Improve Equity in Intermittent Water Distribution Systems. Water Resources Management (2021). https://doi.org/10.1007/s11269-021-02962-9

[2021]

Campisano, A., Modica, C. & Gullotta, A. (2020) Long-term experiments for the evaluation of the potential for storm water control of modular blue roofs in Mediterranean climate, Urban Water Journal, 18:1, 33-42, DOI: 10.1080/1573062X.2020.1850807

[2020]

Campisano, A., Modica, C., Musmeci, F., Bosco, C., Gullotta, A. (2020). Laboratory experiments and simulation analysis to evaluate the application potential of pressure remote RTC in water distribution networks. Water Research, 183(2020), 116072. doi: 10.1016/j.watres.2020.116072

[2020]

Campisano, A., Gullotta, A., and Modica, C. (2019). "Using EPA-SWMM to simulate intermittent water distribution systems Using EPA-SWMM to simulate intermittent water distribution systems." Urban Water Journal, 15(10), 925–933. https://doi.org/10.1080/1573062X.2019.1597379

[2019]

Campisano, A., Gullotta, A., Modica, C. (2019). "Laboratory analysis of the outflow and detention processes from modular tray-based blue roofs." Urban Water Journal, 15(10), 934–942. https://doi.org/10.1080/1573062X.2019.1597377

[2019]

Campisano, A., Gullotta, A., Modica, C. (2019). "Preliminary results of experiments for the evaluation of on-site detention of modular blue roofs." Proceedings of 10th International Conference Novatech 2019 "Moving Toward an Integrated and Sustainable Urban Water Management", p. 271, 1-5 July 2019, Lyon, France, GRAIE (Ed.), Lyon.

[2019]

Campisano, A., Gullotta, A., and Modica, C. (2019). "Modelling private tanks in intermittent water distribution systems by use of EPA-SWMM." Proceedings of 17th International Computing & Control for the Water Industry Conference (CCWI), 1-4 September 2019, Exeter, United Kingdom.

[2019]

Campisano, A., Gullotta, A., and Modica, C. (2019). "Modelling of the filling process of intermittent water distribution system by using EPA.SWMM." Proceedings of 17th International Computing & Control for the Water Industry Conference (CCWI), 1-4 September 2019, Exeter, United Kingdom.

[2019]

INTERNATIONAL CONFERENCES (PARTICIPATION AS A SPEAKER)

10th International Conference on Sustainable Techniques and Strategies in Urban Water Management (NOVATECH). Lyon, July 2019

17th International Computing & Control for the Water Industry Conference (CCWI). Exeter, September 2019

NATIONAL AND INTERNATIONAL SCIENTIFIC CONFERENCES (ORGANIZATION)

PhD Days e Marchi Lecture 2018 - promoted by Gruppo Italiano di Idraulica (GII). Catania, June 2018

17th International Computing & Control for the Water Industry Conference (CCWI). Exeter, September 2019

MAIN RESEARCH INTERESTS

Water distribution systems

- modeling water distribution systems
- leakeges detection and reduction
- intermittent water distribution systems
- equity in water resource distribution
- distric meter areas
- pressure control
- real time control

Urban drainage systems

- modeling of urban drainage systems
- SUDs
- rain water harvesting

BIBLIOMETRIC INFORMATION

Scopus (updated to 28 November 2023)

11 documents, 67 citations by 50 documents, h-index 5, 11 co-Authors.

LANGUAGE SKILLS

Mother tongue(s): **Italiano**

Other language(s):

Inglese

LISTENING B2 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

IT SKILLS

OS and SOFTWARE

Windows

iOS

Microsoft Office

Matlab

LabView

QGIS

EPA-SWMM

EPANET

HEC-RAS

HEC-HMS

AutoCAD

InfoWorks WS Pro

InfoWorks ICM

Hydrus-1D

MEMBERSHIP

Member of the Italian Association of Professional Engineers

[2017 – Current]

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali"

Catania, 28/11/2023

Aurora Gullotta