Curriculum Vitae

Name:	E. Aparicio Medrano, PhD
First Name:	Evelyn
Date of Birth:	6 December 1979
Nationality:	Dutch
Main Disciplines:	Water Resources Management, Environmental sciences, Hydrology, Hydrodynamics, Information System Remote Sensing, Project management
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Key Qualifications

Evelyn Aparicio Medrano is a senior consultant, system and data analyst with extensive international experience in the application of remote sensing technology and innovative applications for environmental monitoring and modelling, water resources management, agricultural applications and sustainable development. She is a Civil Engineer with a MSc in Water Resources Management graduated from TU Delft and a PhD in Applied Physics obtained at TU Eindhoven. Furthermore, highly skilled professional working towards the reduction and mitigation of climate-change hazards, such as droughts and inundations in urban and rural areas by applying the concepts and principles of building with nature and sustainability. She focuses on designing and developing long-term projects centered in earth observation and different environmental modelling techniques for effective planning, implementation, monitoring, assessment and evaluation of multiple sustainable activities in urban and rural areas worldwide. Her experience includes the conceptualization of intelligent systems, analysis, and processing of information, setting up models and analyzing results to identify the vulnerable locations and circumstances during extreme climatic events and calamities. Central to her work is the cooperation between several parties such as businesses, knowledge institutions and governmental instances. Evelyn has several years of experience abroad in countries such as Mozambique, Denmark, Spain, Italy, Bolivia, Colombia, Bangladesh, Cambodia, Indonesia, Vietnam, Ghana, Ethiopia, Morocco, Burkina Faso, Eswatini, South Africa and in The Netherlands.

Educational Background

2009-2014	PhD Department of Applied Physics, Group of Turbulence and Vortex Dynamics, TU Eindhoven & Deltares, The Netherlands. Title of research: Physical aspects explaining Cyanobacteria Scum Formation
2006-2008	MSc Civil Engineering, Water Resource Management, Faculty of Civil Engineering and Geosciences, TU Delft, The Netherlands. Title of MSc thesis research: Urban Surface Water as Energy Source
2004	Dipl. Project Management, CEMLA Institute, Bolivia
2002-2003	BSc Civil and Environmental, Faculty of Science Nature, Hogeschool Utrecht, The Netherlands.
1997-2001	Lic. Civil Engineering, specialization in: Hydraulics and Sanitary Engineering, Faculty of Science and Technology, Universidad Mayor de San Simon, Bolivia.

Training

2021	Design Thinking, edx online learning.
2020	Presentation Skills, Training & Coaching, Utrecht.
2018	Building with Nature, TUDelft online learning.

2018	Knowledge Management and Big Data in Business. TUDelft Online Learning.
2018	Project Management, Leadership. One to one coaching at Hormann Training & Coaching, Utrecht.
2018 , 2016	Coaching for mentors, level 1& 2, A. Hormann Training & Coaching, Utrecht.
2016	Project leadership, Crossbizz, Utrecht.

Professional Experience

2023- present	Senior Consultant at FutureWater, The Netherlands
2018- 2022	Senior Consultant at Nelen & Schuurmans, The Netherlands
2020- 2022	Knowledge & Research lead at Nelen & Schuurmans, The Netherlands
2014– 2018	Consultant at Nelen & Schuurmans, The Netherlands
2009-2014	PhD researcher, Deltares – TU Eindhoven, The Netherlands
2008	Intern Researcher Cornell University Soil and Water Laboratory, New York, USA.
2004-2006	Civil engineer Consultant, CPM Consultancy, Cochabamba-Bolivia
2004	Civil engineer Consultant, S.C.S. Consultancy, Cochabamba-Bolivia
2004	Civil engineer Consultant Multiple Project – MISICUNI Reservoir, Cochabamba-Bolivia
2003	Intern Researcher Soresma N.V. (Antea Group), Antwerp, Belgium

International Professional Experience

As non-resident:	Denmark, Spain, Italy, Bolivia, Colombia, Bangladesh, Cambodia, Indonesia, Vietnam, Ghana, Ethiopia, Morocco, Burkina Faso, Mozambique, Eswatini.

Selection of Assignments and Projects

2023 - now	Science Support to the Blue Deal Program in Mozambique (NL) in ARA-Norte and ARA-SUL. To assess impacts of climate change and testing of mitigation strategies in view of intensive drought hazards leading to water shortages.
2023-now	N4W- Black Volta: Assessing the benefits of NBS in the Black Volta catchment (Ghana side) Major objective of NBS is to reduce sediment loads due to droughts and land use change.
2023 – now	GLOW: Drought Assessment and Mitigation Measures in the Transboundary Basins of the Umbeluzi and Maputo catchments, Team leader FutureWater (client: RVO)
2023 – now	GLOW: Water Availability forecasting services in the Maputo and Umbeluzi basins, Team leader FutureWater (client: RVO)
2023 - now	Umbeluzi Basin Water availability modelling (client: ARA-Sul, BlueDeal)
2023 - now	H2020 EU Project MAGDA, precision agriculture services development. Team leader FutureWater (client: European Union)
2021-2022	H2020 EU Project Climate- IMPETUS, Developing Climate resilient Tools for the assessment of new urban development's considering flood and heat hazards. Team leader Nelen & Schuurmans (client: European Union)
2022	Assessment of information system and commercialization opportunities for SATH in the Niger Basin (client: AKVO, RVO)
2022	Innovative application of Remote Sensing Technologies for dike and reservoir management in Vietnam (client: NIRAS, ADB)
2022	Hydraulic modelling and feasibility study recharge Pakistan (client: Worldwide Fund for Nature (WWF)
2021-2022	Hydrodynamic modelling and assessment using 3Di of the Grenaa Catchment, Denmark (client: Norddjurs Kommune and Syddjurs Kommune)
2021-2022	Application of Satellite Data in the automatic detection of changes in the water system WADIM, team lead (client: SBIR, NSO).
2021	Elaboration of Nature Based Solutions Catalog for Urban Resilience (client: World Bank)
2020-2022	GeoData for Agriculture and Water G4AW SpiceUp project in Indonesia, team leader (client: NSO).

2019-2021	GeoData for Agriculture and Water G4AW SALAD project in Cambodia, team leader (client: NSO).
2019	Study of spatial scale applicability of WAPOR data sets in Ethiopia (client: Utrecht University)
2015-2019	GeoData for Agriculture and Water G4AW SALAD project in Cambodia, team leader (client: NSO).
2015-2019	Earth Observation for Sustainable Development (E04SD): agriculture cluster, team leader Nelen & Schuurmans (client: Eleaf, ESA).
2019-2020	Improving performance of GGMN platform (client: IGRAC).
2021	Flooding Analysis due to dike breaches HHSK (client: HHSK).
2019-2020	Technical support in the Water as Leverage project for Khulna in Bangladesh (client: RVO)
2018	Model setup up and analysis (3Di) for climate-proof water safety studies for the waterboard: Sallandse Weteringen (Client: WHSD).
2014-2018	Hydraulic and hydrological analysis for the reduction of inundations in cities and polder areas in the Zwolle (client: WDODelta)
2015	Flash flood modelling analysis for the city of Accra in Ghana (client: RHDHV, Aquaforall).
2015	Integral inundation risks studies St Lucia (client: GIZ)
2014	Assessment of grid size influence in hydraulic modelling (client: Municipality of Rotterdam).
2009-2014	Investigation of coupling hydrodynamics and biology for the vertical migration of cyanobacteria in lakes. Modelling the interaction between turbulence and cyanobacteria movement. Investigation of the effects of small-scale turbulence for the vertical migration of cyanobacteria. Modelling with Direct Numerical Simulation the influence of small-scale turbulence on the cyanobacteria Microcystis. Investigation of physical factors involved in algae scum formation. Performing laboratory experiments on the presence/absence of bubble with the Microcystis colonies. Planning and performing hydrodynamics and water quality field measurements in Lake Vlietland and other water bodies within NL. Water quality report for Lake Vlietland year 2010.
2007-2009	Investigation of surface-water potentialities as an energy source in urban areas. Investigation the effects of Urban Heat Island phenomenon. Planning and performing temperature, flow and meteorological measurements in the Palaiskwartier urban pond – Den Bosch to study heat island effects.
2008	Design and construction of micro channels for the investigation of colloid retention at the air-water-solid interface. Investigation of colloids retention (pollutants) in partially filled open and closed pores.
2004-2006	Supervision of the project “Outlaying district improvement” for three newly development urban areas. Works included: sanitation works, roads, bridges and communal buildings (client: Municipality of Cochabamba) Elaboration and evaluation of sanitary projects for new urbanizations (client: Municipality of Cochabamba) Supervision of the construction of water and sewer systems (client: Municipality of Cochabamba) Evaluation of materials and standards used during sewerage and drinking water network construction (client: Municipality of Cochabamba). Responsible of the elaboration of monthly reports for the Municipality of Cercado and the Vice-Ministry of Basic Services Bolivia (client: Municipality of Cochabamba).
2004	Project Design and Evaluation of the Program for Development and Social Investment (client: PROPAIS program). Field visits to small communities in the rural area of Potosi, Sucre and Cochabamba in Bolivia Design of Small-Infrastructure Projects. (Bridges, river retention structures, sanitary networks and facilities). Engineering and financial proposals definition. Supervision of Sanitation Systems Construction Works.

2004	Redesigning and verifying the design of water supply intake and distribution system for the city of Cochabamba from the Misicuni River (reservoir).
2003	Investigation and establishment of a methodology for the design of sediment trap structures in rivers. Developing a design software tool “Sediment Trap Design v. 1.0”.

Publications

2021 A Catalogue of Nature-Based Solutions for Urban Resilience. World Bank. 2021.

2018 How can Earth Observation support agriculture developmentin rural areas? EO4SD. Anna Burzykowska,ESA; Almudena Velasco; Annemarie Klaase; Silvia Huber; Paul Geerders, P.;Remco Dost; Arjen Vrielink; Eva Haas; Rolf A. de By; Evelyn Aparicio. Actions and Commitments to the Sustainable Development Goals. A Better World Volume 4.

2018 Temporal and spatial aggregation of the normalized difference vegetation index for the prediction of rice yields (2018). Wietze Suijker & Evelyn Aparicio Medrano. Conference paper: Remote Sensing for Agriculture, Ecosystems, and Hydrology.

2015 Integral water management model for urban areas during extreme rainfall events. Case study: Purmerend, The Netherlands (2015). E. Aparicio Medrano, M. Siemerink and B. Albers. IAHR World Congress, Den Haag- The Netherlands.

2016 An alternative explanation for cyanobacteria scum formation. E. Aparicio Medrano, B.J.H. van de Wiel, R. E. Uittenbogaard, M. Dionisio Pires and H.J.H. C1ercx. Journal of Harmful Algae.

2016 Simulation of the diurnal migration of Microcystis aeruginosa based on a sealing model for physical-Biological interactions. E. Aparicio Medrano, B.J.H. van de Wiel, R. E. Uittenbogaard, M. Dionisio Pires and H.J.H. Clercx. Ecological Modelling Journal.

2014 Physical aspects explaining cyanobacteria Scum formation in natural systems. E. Aparicio Medrano 2014. Ph.D Thesis. Technical University of Eindhoven.

2013 Direct Numerical Simulation of algae migration in a lake, E. Aparicio Medrano, B.J.H. van de Wiel, R.E. Uittenbogaard & H.J.H Clercx. Proceedings of the 14th European Turbulence Conference, 1-4 September 2013, Lyon France.

2013 Coupling hydrodynamics and buoyancy regulation in Microcystis aeruginosa for its vertical distribution in lakes. Aparicio Medrano E., Uittenbogaard R.E., Dionisio Pires L.M. van de Wiel B.J.H and Clercx H.J.H.. Ecological Modelling 248 : 41-56.

2009 Energy capture using urban surface water: modeling and in si tu measurements. Aparicio Medrano E., Wisse K. and Uittenbogaard R.E. Eleventh International IBPSA Conference. Glasgow, Scotland.

2008 Urban Surface Water as Energy Source. Aparicio Medrano E. M.Sc. Thesis TU Delft.

2008 Contact Angle Effects on Colloid Retention in a Capillary Channel (zooê I.Yuniati Zevi, Bin Gao, E. Aparicio, Jan Gooijer, Brian K. Richards, and Tammo S. Steenhuis. Joint Annual Meeting GSO-Agronomy Houston and AGU Florida.

2003 Sediment Trap Design Methodology & Sediment Trap Design V. i.o. Aparicio Medrano E. and I. Rocabado. B.Sc. Thesis. Soresma N.V. - Belgium.

Language Skills

Dutch: Fluent in writing and speech (NT2 Degree)
English: Fluent in writing and speech (TOEFL and GREE)
Spanish: Mother tongue
Portuguese: Intermediate

Honours and Awards

2021 European Union H2020 research and innovation program: IMPETUS project. Lead by EURECAT.

2018 IDSS Intelligent Support System for farmers in Bangladesh. Merit Award in the 18th Asia Pacific ICT Alliance Award 2018.

2011 Second prize Student equipment Nortek AS. Granted by Nortek AS for performing measurements on turbulent flows near bubble plums.

2009 Award for best Internship. Granted by TU Delft – Faculty of Civil Engineering for the performance during the internship at Water and Soil Laboratory in Cornell, USA.

2006 NFP fellowship. Granted by NUFFIC- The Netherlands for following M.Sc. program at TU Delft.

2002 NFP fellowship. Granted by NUFFIC- The Netherlands for following B.Sc. program at Utrecht Hogeschool.