Edgar Belda Ibáñez

Civil Engineer

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Summary

I am an engineer with experience in mathematical modeling of water management. I have worked in the calibration and validation of models applied to the planning of water resources in both the quality and quantity part. I have skills as programmer, software developer and design tools within the field of civil engineering.

Experience

WaterPi / Founding Partner.

January 2018 - CURRENTLY, VALENCIA

Applied engineering consultancy in the management of water resources and environmental projects. Specialized in the development of software and solutions applied to civil engineering.

www.waterpi.com

Freelancer / Civil Engineer.

MARCH 2016 - CURRENTLY, VALENCIA

I work in the field of civil engineering. Collaboration with the Swiss research institute CREALP (www.crealp.ch) in the development and improvement of tools for hydrological and hydraulic modeling. I belong to the hydro10 association (http://rsminerve.hydro10.org/) in which the work carried out is disseminated.

IIAMA / Researcher

APRIL 2013 - FEBRUARY 2016, VALENCIA

I worked as a researcher for the University Institute of Water and Environmental Engineering Research (www.iiama.upv.es) in the group Water Resources Engineering developing tools for the evaluation of the quality of water in natural systems. I also collaborated in the development of models of integrated management of water resources.

Education

PHD in Water and Environmental Engineering

2018-CURRENTLY, Valencia

Student of the doctoral school at the Universitat Politècnica de València. <u>Department of Hydraulic Engineering and Environment</u> (DIHMA)

MSc in Hydraulic Engineering and Environment

2015, Valencia

Final Master's Project (TFM): Development of tools for the analysis and modeling of water quality in wetlands. Application in the area of the Albufera Natural Park of Valencia.

Certification EURACE (EQ7)

<u>Department of Hydraulic Engineering and Environment (DIHMA)</u>

MEng in Civil Engineering. ICE Accredited.

2013. Valencia

Specialty in Hydraulic Engineering and Environment.

Final Career Project (PFC): Evaluation and proposal of actions for the improvement of water quality in the lake of La Albufera, Valencia.

Certification ABET (EQ7)

<u>Universitat Politècnica de València</u> (UPV)

Computer Science Engineering

2014-CURRENTLY, Madrid

Student of the Degree in Computer Engineering, focused on the learning of programming structures, logic, object-oriented programming, databases, artificial intelligence. ..

National University of Distance Education (UNED)

Erasmus + program internship in Politechnika Wrocławska (Wroclaw, Poland).

Projects

Pioneers into Practice - Climate-KIC

https://pioneers.climate-kic.org/

Participation in the Pioneers into Practice programme of the Climate KIC community (2017).

Development of a business model on environmentally responsible mobility in the Valencia area.

Stay in Utrecht in an architectural studio working on urban planning projects and sustainable urban drainage tools.

LIFE + ALBUFERA

http://www.lifealbufera.org/

Participation in the development of tools for the modeling of water quality in the European LIFE ALBUFERA project (LIFE 12 ENV / ES / 000685) Integrated management of three artificial wetlands in compliance with the Water, Birds and Habitats Framework Directives.

AQUATOOL

http://www.upv.es/aquatool/

Collaboration in the development of water resources management models with AQUATOOL software.

RS MINERVE

http://rsminerve.hydro10.org/

Collaboration in the development of new optimization algorithms for the calibration of models created with the RS MINERVE tool. Improvement of the graphic interface of the program, with the design of new vector icons.

RS MINERVE has been developed by the CREALP research center and the HydroCosmos SA engineering office with the collaboration of two universities (Ecole Polytechnique Fédérale de Lausanne and Universitat Politècnica de València) and the Hydro10 association.

training Complementary

16th IWA International Conference on Wetland Systems for Water Pollution Control (International Conference)

http://icws2018.webs.upv.es/

Assistance and poster presentation at the international conference on the use of wetlands for the control of pollutants.

Use of Artificial Neural Networks for modelling the trophic state of water bodies, applied to the Albufera de Valencia Natural

Park (cotutorization))

http://hdl.handle.net/10251/85329

Cotutorization Laura Ramos Soler Final Master's Project.

DROUGHT (International Conference)

http://www.icdrought2015.upv.es/

Assistance to the international conference on research in the situation of droughts.

Water Resources Assessment & Seasonal Prediction (International

Conference)

http://www.proc-iahs.net/374/187/2016/

Attendance and participation in the international conference about the management of water resources and their seasonal prediction.

Title of the paper: River water quality modeling under drought situations. The Turia River case.

Analysis and modeling of water resources systems with the AQUATOOL Software (Online course)

http://www.upv.es/aquatool/en/cursoonline en.html

Collaboration as a teacher, in the online course offered by the <u>Permanent Training Center</u> (CFP) of the <u>Universitat Politècnica de València</u> (UPV).

Languages

Spanish (Mother Tongue),

Valencian (Fluent),

English (Fluent)

Courses

Applications of the Theory of Graphs to real life

(2015)

Course offered by UPV [X], an open online learning initiative of the UNIVERSITAT POLITÈCNICA DE VALÈNCIA.

$\label{thm:constraint} \textbf{Technologies and processes of human development}$

(2012

Analysis of the application of technologies for cooperation projects in developing countries.