



guzmánLópez

marine biologist and IT analyst student

about

30 years
Male, Uruguayan
🏠 Montevideo,
Uruguay

contact

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📧 @Guzman

languages

Spanish mother tongue
English basics

programming

♥ R language (6 yr)
JavaScript, HTML5 &
CSS (3 yr)
🐱 guzmanlopez

also:

SQL basics (2 yr)
ASP.Net with C# (< 1 yr)

OS

🐧 Linux (6 yr)

interests

professional: data analysis, research, programming, hydroacoustics, web app creation, databases, seabed habitat mapping, big data, echosounders, sonars, marine ecology, spatial analysis, fisheries, fish behaviour, geographic information systems, marine traffic analysis **personal:** friends, tango dancing (learn and teach), tango music, hiking, free software development, ocean, nature, wildlife, read.

education

2015-Now	IT Analyst	ORT University – Faculty of Engineering, Montevideo
	Courses until now: Databases II (SQL syntax, queries, triggers) – studying Programming III (ASP.Net with C#) – studying Databases I (SQL syntax, queries, ERM) – 82/100 (partially approved, last exam) Programming II (ASP.Net with C#) – 88/100 (partially approved, last exam) Usability and Accessibility workshop (CSS) – 96/100 (totally approved) Programming I (JS, HTML) – 100/100 (totally approved) Computing Introduction – 86/100 (totally approved)	
2004-2011	Biology sciences graduate	University of the Republic – Faculty of Sciences, Montevideo
	Specialization in Oceanography Global mark: 9.44 1 to 12 (max) Courses: 23 approved / 23 total Exams: 26 approved / 24 total (+2 exonerated)	
2003	Bachelor	Pre-University Institute Juan XXIII, Montevideo
	Specialization in Agronomy Mark: 9 1 to 12 (max)	
1998-2002	High School Student	Pallotti High School, Montevideo
	Specialization in Biology Marks: 12 (1998) – 12 (1999) – 11 (2000) – 12 (2001) – 11 (2002) 1 to 12 (max)	

experience

2014-Now	National Direction of Aquatic Resources (DINARA)	Montevideo, Uruguay
	Hydroacoustic consultant Acquisition, processing, visualization and analysis of scientific echosounder and sonar data. The main goals are: <ol style="list-style-type: none">1. Give accurately aquatic resources abundance and spatial distribution estimation using hydroacoustic methods.2. Map underwater habitats.3. Incorporate different free software Information Technologies to analyze acoustic sonar data.4. Write technical research reports, presentations in conferences and workshops to share the knowledge achieved.	

2013	Project: FREPLATA II (PNUD - GEF) <i>Oceanographic data management assistant</i> Organization, systematization and analysis of historical and new generated data relating to meteorological and oceanographic variables. The main data came from meteorological stations and oceanographic sensors mounted on buoys or fixed stations in the Río de La Plata estuary.	Montevideo, Uruguay
2010-2012	Project: Fisheries Management in Uruguay (DINARA - FAO) <i>Hydroacoustic consultant specialist</i> Acquisition, processing, visualization and analysis of scientific echosounder and sonar data. The main goals were: <ol style="list-style-type: none"> 1. Give accurately aquatic resources abundance and spatial distribution estimation using hydroacoustic methods. 2. Map underwater habitats. 3. Write technical research reports, presentations in congress and workshops to share the knowledge achieved. 	Montevideo, Uruguay
2009	Subprojects: Whitemouth croaker and Argentine hake (FAO - Ricaldoni Foundation) Montevideo, Uruguay <i>Hydroacoustic technical support</i> Take part in Argentine hake (<i>Merluccius hubbsi</i>) and Whitemouth croaker (<i>Micropogonias furnieri</i>) fish abundance assessment surveys aboard the National Direction of Aquatic Resources research vessel Aldebarán. Analyse and compare fish biomass estimations by means of hydroacoustic methods and classic swap area methodology.	
2008	National Direction of Aquatic Resources (DINARA) <i>Hydroacoustic collaborator.</i> Help acquiring, processing and visualizing acoustic data from the research survey: "Assessment of the Hawkfish (<i>Cheilodactylus bergi</i>) by means of hydroacoustic methods and classic swap area in the Uruguayan Exclusive Economic Zone (EEZ)", aboard the National Direction of Aquatic Resources research vessel Aldebarán.	Montevideo, Uruguay

research surveys

2012-07	Collaborator Search lost plane near Las Flores island in the Río de la Plata estuary using a Side Scan Sonar.	Army vessel "ROU 72"
2011-09	Hydroacoustic chief area Ban fishing area of Argentine hake <i>Merluccius hubbsi</i> .	R/V "Aldebarán"
2011-04	Hydroacoustic chief area Ban fishing area of Argentine hake <i>Merluccius hubbsi</i> .	R/V "Aldebarán"
2010-08	Hydroacoustic chief area Big pelagic fishes (swordfishes, tunas, sharks and others) in the outer Continental Shelf and Slope of the Uruguayan Exclusive Economic Zone (EEZ).	R/V "Aldebarán"
2010-05	Hydroacoustic chief area Environmental monitoring of the Río de la Plata estuary and the oceanic coastal front; health management of bivalve molluscs.	R/V "Aldebarán"
2009-12	Hydroacoustic chief area Survival of the Whitemouth croaker <i>Micropogonias furnieri</i> .	R/V "Aldebarán"

2009-11	Hydroacoustic technical support Hydroacoustic assessments in the ban fishing zone of the Río Uruguay river between kilometers 314.1 and 318.6.	Small boat
2009-07	Hydroacoustic technical support Hydroacoustic assessments of concentrations and reproduction areas of fishes with high sport fishing value in Río Uruguay river, between kilometers 314.1 and 318.6.	Small boat
2009-03	Hydroacoustic chief area Ban fishing area of Argentine hake <i>Merluccius hubbsi</i> .	R/V "Aldebarán"
2008-12	Hydroacoustic technical assistant Assessment of topographic characteristics.	R/V "Aldebarán"
2008-12	Hydroacoustic chief area Coastal fisheries assessment survey.	R/V "Aldebarán"
2008-11	Hydroacoustic technical assistant SIMRAD EK-60 echosounder calibration.	R/V "Aldebarán"
2008-09	Hydroacoustic technical assistant Assessment of the Hawkfish (<i>Cheilodactylus bergi</i>) by means of hydroacoustic methods and classic swap area in the Uruguayan Exclusive Economic Zone (EEZ).	R/V "Aldebarán"
2007-12	Scientific shipboard observer Assessment of <i>Chaceon notialis</i> crab in the Argentine–Uruguayan common fishing zone.	F/V "Lucía Carmen"

research projects

2009	Initiation research scholarships One year personal scholarship. The aim of the project was quantifying the benthic microalgal biomass and production (carbon fixed) in a shallow coastal lagoon.	National Agency for Research and Innovation (ANII)
2009	Research scholarships for students One year team scholarship. The aim of the project was studying the benthic ecosystem (fauna and environment variables) in a small port.	Sectoral Commission for Scientific Research (CSIC)

teaching

2012	Submarine acoustics workshop One class about submarine acoustics principles, sonar types and applications and case of studies in Uruguay.	to Marine Technical High School
2011	Geographic Information System (GIS) approach. two theoretical and practical classes of GIS software based on QGIS.	to National Museum of Natural History
2009	Basic Limnology course collaboration Three practical classes of physical chemistry of water.	University of the Republic
2009	Supervision and analysis of chlorophyll samples from students research project. Preparation, extraction and determination of chlorophyll from water samples. Included data analysis and discussion with students.	University of the Republic

communication skills

2014	Oral presentation Hydroacoustic methods applied for the studying of aquatic ecosystems in Uruguay.	First week of sound – Uruguayan Acoustic Association
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2012	Poster	Biodiversity and ecology interdisciplinary meeting – University of the Republic Benthic fauna of La Paloma port and coastal adjacent areas.
2011	Oral presentation	Regional Acoustic meeting – Uruguayan Acoustic Association Seabed habitat mapping of the upper and middle continental slope of Uruguay.
2011	Oral presentation	Week of Science and Technology – Direction for Innovation, Science and Technology development Uruguayan seabed between 200 and 2000 meters of depth: habitats and associated fauna.
2010	Poster	First Uruguayan Zoological Congress – Uruguayan Zoological Society Marine macromolluscs of unconsolidated bottoms from adjacent coastal area of La Paloma port.
2010	Oral presentation	First Uruguayan Zoological Congress – Uruguayan Zoological Society Hydroacoustic assessment in Río Uruguay River and ban fishing area of port Yeruá.
2009	Poster	Get out of the classroom – Support research projects program for university students Benthic system of La Paloma port and adjacent coastal area.

complementary education

2015	Safe practices in Laboratory Mark: 8/10	University of the Republic - Course
2014	Introduction to databases analysis using R Approved: without mark	University of the Republic - Course
2014	Linux network administration Mark: 100/100	Linux Center - Course
2012	Introduction to underwater archeology Approved: without mark	University of the Republic - Workshop
2011	Introduction to R language programming Approved: without mark	University of the Republic - Course
2011	Seismic and acoustic imaging of sedimentary structures including hydrocarbon exploration and geohazard evaluation Approved: without mark	University of the Republic - Postgrade course
2011	Associated process of water masses dynamics Approved: without mark	University of the Republic - Postgrade course
2009	Fishing stocks determination methodologies Mark: 10/12	University of Buenos Aires - Postgrade course
2009	Effective publication of scientific information Approved: without mark	UNESCO - Course
2009	Fishing stocks evaluation models and their application on Uruguayan fishing resources Approved: without mark	DINARA–FAO - Course
2008	Acoustic submarine prospections Assisted: without mark	DINARA - Meeting
2008	Echoview training course Approved: without mark	DINARA–Myriax Echoview - Course
2008	Scientific shipboard observer Approved: without mark	DINARA - Course

publications

articles in peer-reviewed journals

Management and research on plastic debris in Uruguayan Aquatic Systems: update and perspectives

Juan Pablo Lozoya, Alvar Carranza, Javier Lenzi, Emanuel Machín, Franco Teixeira de Mello, Silvana González, Daniel Hernández, Gissell Lacerot, Gastón Martínez, Fabrizio Scarabino, José Sciandro, Gabriela Vélez-Rubio, Fernanda Burgues, Daniel Carrizo, Felipe Cedrés, Julio Chocca, Daniel de Álava, Sebastián Jiménez, Valentina Leoni, Pablo Limongi, Guzmán López, Yamilia Olivera, Mariana Pereira, Luis Rubio, Federico Weisntein

Revista de Gestão Costeira Integrada **15.3 (Aug. 2015) pp. 377–393. 2015**

Hydrodynamic and geomorphological controls on surface sedimentation at the Subtropical Shelf Front / Brazil–Malvinas Confluence transition off Uruguay (Southwestern Atlantic Continental Margin)

P. Franco-Fraguas, L. Burone, M. Mahiques, L. Ortega, C. Urien, A. Muñoz, G. López, Y. Marin, A. Carranza, N. Lahuerta, C. Mello

Marine Geology **349 (Mar. 2014) pp. 24–36. 2014**

Deep-water coral reefs from the Uruguayan outer shelf and slope

GRUPO MIGUEL OLIVER URUGUAY 0110, Alvar Carranza, Araceli Muñoz Recio, Marcelo Kitahara, Fabrizio Scarabino, Leonardo Ortega, Guzmán López, Paula Franco-Fraguas, Camila Mello, Juan Acosta, Antia Fontan

Marine Biodiversity **42.3 (Sept. 2012) pp. 411–414. 2012**

reports

Hydroacoustic assessment in Santa Lucía River (Uruguay).

Guzmán López, Gerardo Rodríguez, Diego Pagano, Juana Fernández, Leonardo Ortega

Research report, 2016

ER60 EK-60 SIMRAD echosounder's software guide.

Guzmán López

Software user guide, 2015

Interactive map of artisanal fishing zones and artisanal ports in Uruguay.

Guzmán López

Software user guide, 2015

Web application to extract, convert and visualize Tritech StarFish 990F Side Scan Sonar navigation.

Guzmán López

Software user guide, 2015

Hydroacoustic assessment in Noboa reservoir (Salto, Uruguay).

Guzmán López, Silvana González, Julio Chocca, Bernardo González, Rosanna Foti

Research report, 2015

Configuration and maintenance of the EK-60 SIMRAD echosounder's local network in the research vessel "Aldebarán".

Guzmán López, Gerardo Martínez

Technical report, 2015

Assessment of seismic prospection activity in the continental shelf of Uruguay.

Luis Rubio, Silvana González, Guzmán López, Claudio Berriolo, Sebastián Jiménez, Javier Lenzi, Andrés Domingo

Research report, 2015

Hydroacoustic methods applied for the studying of aquatic ecosystems in Uruguay.

Guzmán López, Silvana González, Yamandú Marín, Julio Chocca

Conference report, 2014

"Ema" web application.

Guzmán López

Software user guide, 2013

Guidelines for an oceanographic database.

Guzmán López

Technical report, 2013

"MODIS" web application.

Guzmán López

Software user guide, 2013

"Pampero" web application.

Guzmán López

Software user guide, 2013

Hydroacoustic assessment in Calcagno lake.

Guzmán López, Yamandú Marín, Julio Chocca, Sebastián Horta

Technical report, 2012

Hydroacoustic assessment of the Argentine hake ("Merluccius hubbsi") in the Argentinian–Uruguayan fishing zone from research fishing bottom trawls.

Guzmán López

Research report, 2011

Seabed habitat mapping of the outer continental shelf and slope of the Uruguayan Exclusive Economic Zone (EEZ).

Guzmán López, Camila De Mello

Research report, 2011

Seabed habitat mapping of the upper and middle continental slope of Uruguay.

Guzmán López, Camila De Mello, Yamandú Marín

Conference report, 2011

Hydroacoustic assessment in Uruguay River. Ban fishing area of port Yeruá.

Ariel Cabreira, Silvana González, Gustavo Alvarez-Colombo, Guzmán López, Federico Castro-Machado, Camila De Mello

Research report, 2010

Hydroacoustic assessment in Uruguay River (Salto Grande, Meseta de Artigas and Ban fishing area).

Ariel Cabreira, Silvana González, Gustavo Alvarez-Colombo, Guzmán López, Federico Castro-Machado, Camila De Mello

Research report, 2010

Big pelagic fishes research survey technical report.

Guzmán López

Research report, 2010

SIMRAD EK-60 echosounder calibration.

Guzmán López

Technical report, 2010

Bathymetry of La Paloma port by means of hydroacoustics methods.

Guzmán López

Research report, 2009

Hydroacoustic assessment of Argentine hake (*Merluccius hubbsi*) and by-catch in the Argentinian–Uruguayan fishing zone.

Guzmán López

Research report, 2009

Hydroacoustic assessment of Whitemouth croaker (*Micropogonias furnieri*) and Stripped weakfish (*Cynoscion guatucupa*) in the Argentinian - Uruguayan fishing zone.

Guzmán López

Research report, 2009

Target Strength (TS) measurements of captive Whitemouth croaker (*Micropogonias furnieri*), Stripped weakfish (*Cynoscion guatucupa*), Brazilian codling (*Urophycis brasiliensis*) and Angel shark (*Squatina guggenheim*).

Guzmán López

Research report, 2009

Preliminary results of biomass estimation of the Hawkfish (*Cheilodactylus bergi*) by means of hydroacoustic methods.

Guzmán López

Research report, 2008