

# William J. Hernández López

Address: 3033 Sect Cobo Apt. 3 Aguadilla, PR 00603

Tel. (787) 409-0260, (787) 882-1012

Email: [williamhernan@gmail.com](mailto:williamhernan@gmail.com), [william.hernandez@upr.edu](mailto:william.hernandez@upr.edu)

---

## Education:

**B.S. in Science in Biology** (2000) Major: Biology (142 crs.) GPA: 3.60  
University of Puerto Rico-Mayagüez Campus

**M.S. in Environmental Sciences** (2005) Major: Water Resources (42 crs.) GPA: 4.00  
Inter American University of Puerto Rico-San German Campus

**Ph D. in Marine Science** (expect. 2011) Major: Oceanography (70 crs.) GPA: 3.90  
University of Puerto Rico-Mayagüez Campus

**Professional Development Courses** (16 crs.) GPA: 4.00  
Psychology of Learning and Development, Biochemistry, Analytical Chemistry

---

## Professional Experience:

### Dates

**Geographic Mapping Technologies Corp.** 06/2008-present  
54 Calle Mayagüez, San Juan, Puerto Rico 00936  
**Duties:** GIS Consulting (Project Manager, Service Representative, Instructor)

**University of Puerto Rico-Mayaguez Campus** 06/2006-present  
Mayaguez, Puerto Rico  
**Duties:** Graduate Researcher, Webmaster Bio-Optical Oceanography Laboratory  
<http://bio-optics.uprm.edu>

**U.S. Fish & Wildlife Service** 04/2005-02/2008  
Caribbean National Wildlife Refuge. Boquerón, Puerto Rico  
**Duties:** Fish and Wildlife Biologist/GIS Specialist (GS-07)

**Inter American University of Puerto Rico-San German Campus** 03/2003-07/2005  
San German, Puerto Rico  
**Duties:** Geographic Information System Computer Analyst/Technician

---

## Seminars and Workshops:

*National Oceanic and Atmospheric Administration Educational Partnership Program Fifth Education and Science Forum.* Howard University, Washington DC, November 2009

*FWS GIS National Workshop.* National Conservation Training Center. Shepherdstown, WV. U.S. Fish & Wildlife Service. 2006; 2007

*USFWS Refuge Lands GIS Training,* Broomsfield, Colorado, March, 2007

*ESRI Federal User Conference,* Washington DC, January 8-12, 2007  
*ESRI Annual International User Conference,* San Diego, C.A. ESRI. 2006; 2004

*GIS Design for Natural Resource Lands Management.* National Conservation Training Center. Shepherdstown, WV. U.S. Fish & Wildlife Service. December, 2005

*GIS Cartographic Design Course*. National Conservation Training Center. Shepherdstown, WV. U.S. Fish & Wildlife Service. August, 2005

ESRI Virtual Campus Online Courses (<http://campus.esri.com>)

*Working with Geodatabases Topology*

*Working Map Projections and Coordinate Systems in ArcGIS*

*Getting Started with Scripting in ArcGIS*

*Editing in ArcGIS 9: Tips and Tricks*

*Getting Started with Surface Analysis using ArcGIS Spatial Analyst.*

*Learning ArcGIS 3D Analyst.*

*Groundwater Flow and Transport Modeling with GMS*. Park City Marriott Hotel, Park City, Utah  
Dr. Norm L. Jones. October, 2003.

---

## **Special Skills:**

**Bilingual:** Spanish and English languages

**Computer Systems:** Mac OS, Windows, Unix, Linux

**Specialized Software:** ArcView v9.3, Spatial Analyst, 3D Analyst, ArcIMS 9.3, ArcPad 8, Groundwater Modeling System v4.0, SeaDAS v5.4, ENVI v4.5, ERDAS Imagine, ORIGIN v7.0, Trimble GPS Correct. Adobe Dreamweaver

Oceanographic, Bio-optical, and Remote Sensing Techniques and Instrumentation

**Equipments:** GPS receivers (Garmin, Trimble Mapping Grade) Bio-Optical Equipment (Satlantic Hyperspectral Profiler, GER 1500 Spectroradiometer, Optical Package, Solarlight PMA2100 Datalogging Radiometer (PAR Collector))

---

## **Research:**

*Modeling the potential habitat of mesophotic coral reefs in the Puerto Rico-Virgin Islands Geological Platform.* (Current Dissertation Topic). Department of Marine Sciences. University of Puerto Rico-Mayaguez Campus

*Development of a benthic habitat map using different remote sensing methods: a case study for Vieques Island South Coast Bays.* 2005.

*Determination of Groundwater and Particle Flow Using Mathematical Modeling in Groundwater System of Barrio Llanos, Lajas, Puerto Rico.* 2005.

---

## **Achievements, Awards and Affiliations:**

Member of the Association of American Geographers (AAG) (2006-2007)

Graduate Student in Environmental Sciences Academic Excellence Award: Inter American University-San German Campus (2004, 2005)

Academic Excellence Graduate Honor Student: Academic Excellence Award Ceremony, Inter American University-San German Campus (2004)

Who's Who Among American Students Award (2004, 2005)

PRIDCO Scholarship for Masters in Environmental Sciences 2003-2004. Commonwealth of Puerto Rico-PRIDCO

UPR Mayaguez Campus Graduation (2000) Magna Cum Laude Student  
Dean's List Award (1999)  
Golden Key National Honor Society Member (since 1998)  
All-American Scholar Award (1997)

---

### Key Presentations and Publications:

Armstrong, R and **W. Hernández**. 2009. **Web-based Scientific and Outreach Tools for Geographic Data Dissemination**. *National Oceanic and Atmospheric Administration Educational Partnership Program Fifth Education and Science Forum*. Howard University, Washington DC, USA.

Gilbes, F., **W. Hernández**, N. Hernández, J. Martínez, and V. Rodriguez (2008) **MODIS Validation for Water Quality Parameters in Mayagüez Bay**, Oral Presentation, Annual NOAA-CREST Symposium, Mayagüez, Puerto Rico. [http://gers.uprm.edu/pdfs/pres\\_crest08.pdf](http://gers.uprm.edu/pdfs/pres_crest08.pdf)

**Hernandez, William J.**, Gilbes, Fernando. 2007. **GERSVIEW: A New Database for Web Mapping**. PRYSIG 2007. University of Puerto Rico Mayagüez Campus [http://gers.uprm.edu/pdfs/pres\\_whernandez.pdf](http://gers.uprm.edu/pdfs/pres_whernandez.pdf).

Hernández, William J. 2006. **Use and Application of GIS in Wildlife Refuges**. 4<sup>th</sup> Annual Geographic Information Systems and Remote Sensing Conference. University of Puerto Rico-Mayagüez Campus. <http://cacique.uprm.edu/prysig/index.html>

Hernandez, William J. 2005. **Determination of Groundwater Flow using Mathematical Flow Models in Barrio Llanos Costa, Lajas, Puerto Rico**. X Ibero-American Conference of Geographic Information Systems, San Juan, Puerto Rico.

**Hernandez, William J.**, Sanders, Ilse. **GIS for University Infrastructure and Natural Resources Sustainable Management**. ArcNews Online. Summer 2005 ESRI Press. 2005.

---

### References:

Roy Armstrong, Ph.D  
Bio-Optical Oceanography Laboratory  
UPR Mayagüez Campus, Department of Marine Sciences  
(787) 899-2048 X- 249  
[royaarmsmtrong@yahoo.com](mailto:royaarmsmtrong@yahoo.com)

Fernando Gilbes, Ph.D  
Geological and Environmental Remote Sensing Laboratory (GERS)  
UPR Mayagüez Campus, Department of Geology  
(787) 832-4040 X-3000  
[fernando.gilbes@upr.edu](mailto:fernando.gilbes@upr.edu)

Susan Silander  
Project Leader  
US Fish and Wildlife Service  
Caribbean Islands NWR  
Boquerón, Puerto Rico  
(787) 851-7258 X-238  
[susan\\_silander@fws.gov](mailto:susan_silander@fws.gov)

Revised 06/2010