

Alexis Cruz-Benitez

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Objective

Looking for a summer internship and the opportunity to apply my knowledge and skills in Geology, Meteorology, Remote Sensing and related areas of study.

Education

2009-Present **University of Puerto Rico, Mayagüez Campus (UPRM)**

MS Geology

Cumulative GPA: ---

Graduation Date: December 2011

2003-2009 **University of Puerto Rico, Mayagüez Campus (UPRM)**

BS Geology

Minor: Meteorology

Cumulative GPA: 3.11, Major GPA: 3.38 in a 4.00 scale

Work Research Experience

Summer 2009 **US Army Corps of Engineers, Cold Regions Research and Engineering Laboratory (CRREL)**

Dr. Steven F. Daly, Mentor, USACE-CRREL. Agreement with NOAA and UPRM.

Analysis of SSM/I Brightness Temperature and Snow Water Equivalent of Watersheds in Western Afghanistan, January-March 2008

- Compare calculated SWE with SSM/I Analysis of Western Afghanistan in winter 2007-08 and look for why the SSM/I Analysis show values of SWE out of their normal range.

Spring 2009 **University of Puerto Rico, Mayagüez Campus (UPRM)**

Dr. Fernando Gilbes, Mentor, Department of Geology, UPRM

Spectral Slope Analysis of Suspended Sediments of Mayaguez Bay (Undergraduate Research)

- The graphs of Remote Sensing Reflectance vs. Wavelength of water samples from Mayaguez Bay was analyzed to know how the growth of organic matter and the minerals affect the spectral signal, in terms of concentration

Fall 2008 **University of Puerto Rico, Mayagüez Campus (UPRM)**

Dr. Fernando Gilbes, Mentor, Department of Geology, UPRM

Spectral Effect on Minerals in Sediments of Mayaguez Bay (Undergraduate Research)

- Water samples were filtered and a radiometric measurement was taken from the sediments. Graphs of Remote Sensing Reflectance and Concentration of sediments was generated and interpreted. The next step in this research is to identify the minerals in the suspended sediments.

Summer 2007 **Michigan Technological University (MTU)**

Agustin Robles, PhD. Student, Dr. Alex S. Mayer, Dr. Kathy Halvorsen, Mentors (MTU)

Seeking Integrated and Sustainable Solutions to Water and Sanitation Problems in the Rural Rio Sonora Basin in Mexico

- Interview people in different towns of the basin about pollution and sanity of water.
- Analyze interviews and make conclusions on Risk Perceptions.

Summer 2006 **University of Puerto Rico, Mayagüez Campus (UPRM)**

Dr. Luis R. Perez-Alegría, Advisor, Department of Agricultural Engineering and Bio-systems, UPRM. Agreement with NOAA and UPRM.

Effect of the Growth Chambers in the Physiology of Environmental Sugarcane

- Study the effect of CO₂ and Temperature in the physiology of sugarcane inside chambers and open atmosphere. The growth of the sugarcane was proportional to increase of Temperature and concentration CO₂.

Summer 2004 **University of Puerto Rico, Mayagüez Campus (UPRM)**

Dr. Carlos U. Pabón-Ortiz, Mentor, Department of Physics, UPRM. Agreement with NOAA and UPRM.

Climatological Stations of Puerto Rico

- With a database from National Weather Service of Puerto Rico, analyze the different micro climates that the island of Puerto Rico has.

Skills

Basic knowledge and familiarity with the following computer software and languages: ENVI, ArcGIS, Microsoft Office and MatLab.

Associations & Teams

President on a Christian Association (Asociación de Colegiales Evangélicos (ACE))

Leader on UPRM-American Meteorological Society (AMS) Student Chapter

American Meteorological Society (AMS)

Student Geological Society (SGE)

References

Available upon request.