

Albalyra Geraldine Vargas Bustamante

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Education

Massachusetts Institute of Technology (MIT) – Cambridge, MA

Master of Science in Civil Engineering - GPA 4.3/5.0 – Fulbright Scholarship

June 2013

Area of Study: *Geotechnical Engineering*. Research: Characterization of triaxial compression undrained shear behavior of Resedimented Boston Blue Clay at very high overconsolidation ratios.

Universidad Tecnológica de Panamá (UTP) – Panama

Bachelor of Science in Civil Engineering - GPA 2.62/3.00 - Honor Chapter: Sigma Lambda

February 2010

Thesis: "Influence of Curing and Vibrating the Concrete in the Discrepancies of the Results of the Compressive Strength Tests"

Universidad Latina de Panamá – Panama

Bachelor of Science in Finance, Banking and International Business Management - GPA 95.42/100 - Honor Mention

April 2009

Experience

Panama Canal Authority – Panama

September 2010 – July 2011

Civil Engineer, Engineering Division - Geotechnical Branch

- Conducted 18 geotechnical site investigations by interpreting borehole logs and analyzing additional laboratory tests. Recommended the design soil bearing capacity and the most suitable foundation system.
- Inspected slope failure landslide on Monte Lirio access road to the Panama Canal expansion construction site; determined the causes and extent of damages, and proposed a solution with the stability design and drawings. Estimated cost \$340,000
- Recorded and reviewed the seismograph daily reports for the vibration control program for the Panama Canal Expansion Project. Updated the water levels database for the landslides control program.
- Collaborated with a multi-discipline team in each assigned task. Delivered technical reports with findings to the clients.

FCC Construcción de Centroamérica, S.A – Panama

July 2010 – September 2010

Quality Engineer, Project: Maintenance of Highways and roads in Circuit "A" of the Province of Panama. Cost \$13.0M

- Oversaw concrete and asphalt roads maintenance, including field supervision of concrete placement, revision of quantities, material quality control and topographic survey.
- Collaborated with the project management team in the effective closure of the monthly payment application.
- Instituted a spreadsheet for the material procurement traceability and quality management and developed a systematic procedure for the document control, quality records and non-conformities of the project.
- Ensured that the adequate corrective measures were implemented in cases of noncompliance.
- Implemented the quality control program in agreement with the contract and company requirements based on ISO 9000.
- Identified opportunities for improvement and advised the project management team on issues that occurred during the execution of the project.

Panama Canal Authority – Panama

May 2009 – July 2010

Engineer Assistant, Project Management Division, Projects: Excavation of the Pacific Access Channel Phase 1 (Cost \$40.4M) and Phase 3 (Cost \$36.6M) for the Panama Canal Expansion Program

- Started as a student assistant for a 3-month internship and subsequently was hired for a full-time position as an administrative assistant with quality control and contract management responsibilities.
- Assisted the project engineer in all kinds of project management tasks, including: preparation of monthly presentations for the executive team, review of submittals, and contract document control such as correspondence, submittals, and quality reports.
- Developed a spreadsheet to analyze the results of the field and laboratory testing such as concrete strength test and soil density.

Leadership

Graduate Women at MIT (May 2012 – Present)

Co-Chair for the 2012 Orientation Women's Welcome Lunch

Event Lead for the 2012 Leadership Conference

MIT Consulting Club (August 2012 – Present)

Member

MIT vs. Harvard Case Competition 2012 Participant

MIT \$100K Entrepreneurship Competition (September 2012 – Present)

2012 Leadership Team

Skills

Software: Proficient in Windows and OS X, Microsoft Office, Programming in Visual Basic, AutoCAD Civil 3D, Bentley MicroStation, ORACLE PCM: Primavera Contract Manager, SAP, PLAXIS, GEOSTUDIO

Languages: Bilingual English/Spanish