

ADRIEL LEÓN PÉREZ, BSME

ASSISTANT ENGINEER

EDUCATION

Bachelor Degree in Science of Mechanical Engineering –
Polytechnic University of Puerto Rico

2011

COURSES

Mechanical Engineering Capstone

- Designed and manufactured the suspension, brake and steering systems for the formula SAE 2011 vehicle

Designed of Thermal System

- Designed of program (powered by Matlab) for the analysis of a compact heat exchanger and modified Hardy-Cross heat exchanger

Mechanics of materials

- Designed of a scuba diving tank using theories of pressure vessels

Aerospace Engineering

- Designed and fabrication of a four-propeller helicopter which completed circuit in minimal timing, including maximum load capacity

SKILLS

- **Computer programs:** REVIT, AutoCAD, HAP 4.8, McQuay Acoustic Analyzer, Daikin tools, SolidWorks, Pro-Engineer, Working model, Matlab, MathCAD
- **CNC Milling Machine (HAAS):** manufacturing knowledge and practice
- **Conventional manufacturing:** using lathe and milling machines

EXPERIENCE

HVAC

- Experience in the design of thermal calculations, acoustical analysis and unit selection of HVAC systems. Worked and assisted in kitchen and laboratory ventilation systems. General knowledge in chilled water systems, HVAC controls and as-built design (21st Century Schools, Hyatt House Hotel, El Meson, T-Mobile and Yogurfit; healthcare facilities as Iris O'Neal Clinic in Virgin Gorda, Atlantis Renal Centre and Industrial Hospital. Assisted in pharmaceutical projects like Lilly del Caribe.

Energy models

- Worked extensively using HAP 4.8 software in many energy models including The Public Building Authority of Puerto Rico and several LEED projects and in the Energy Conservation Measures calculations.

LEED (Leadership in Energy and Environmental Design)

- Worked in the Energy (Indoor Quality), thermal comfort and renewable energy credits in the Vocational School Bernardino Cordero Bernard of Ponce, Belen Blanco de Zequeira school of Loiza, Rebekah Colbergh and the Vocational School of Corozal.

Plumbing systems

- Experience in the selection of plumbing equipment including pumps, expansion tanks, grease interceptors and plumbing fixtures. Also, worked with rain water and fire protection cisterns.

Fire Protection systems

- Basic knowledge of fire protection systems including sprinklers, fire protection cisterns, fire hose cabinets and fire extinguishers.