# Andrés G. Bisonó León

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# **EDUCATION**

**Drexel University** 

Bachelor of Science in Mechanical Engineering Bachelor of Science in Business Administration | Major in Finance

# PROFESSIONAL EXPERIENCE

New Hudson Facades | Related Companies

Mechanical Engineer, Design and Construction

- Engineering team member for curtain wall design and construction of 55 Hudson Yards, New York, NY - project worth \$104,000,000

- Improved design software (Inventor) by creating an internal Add-In, minimizing engineering production time by 1/4 of the time
- · Provided training, support and coordination to operations team, factory, and field personnel on curtain wall fabrication and assembly as needed
- Developed and refined processes for design and engineering, manufacturing, and installation departments
- Generated project submittal drawings for use and review by external design team (Architect/Consultant/GC)
- Developed 3D parametric models to generate information used for curtain wall production to include: machining parts, unit assembly and installation

# **Drexel University, College of Engineering**

Tutor

- · Coached students one-on-one in Fluid Mechanics, Statics, Engineering Economic Analysis, and Computer-Aided Design
- Assisted students with the development of engineering skills to achieve academic outcomes

#### Krones, Inc.

Mechanical Engineer

- Designed single parts and assemblies for industry using Solid Edge as project leader
- Designed an adaptation system that allowed the machine to label round and square bottles reducing customer costs and increasing plant efficiency
- Established costs and return of investment of new designs for packaging and bottle testing equipment
- Purchased bottle testing equipment from a manufacturer to reduce production costs by \$10,000
- Worked with manufacturers to produce fixtures (2X\$5,000) for mold cleaning and testing reducing production time by four weeks
- Worked with German HQ's to internally manufacture a fixture to replace the manual assembling of parts resulting in the reduction of time and cost
- Prepared calculations of created designs to implement successful operation

#### **PROJECTS - RESEARCH** Seminar in Finance

# Portfolio Management | Financial Analyst

- Analyzed past and projected future economic and financial market environment
- Developed strategic allocation plan based on economic environment and risk-return trade-off
- Constructed a mock portfolio based on full implementation on asset allocation including company specific as well as Mutual Funds and ETFs

#### Senior Design

Experimental Apparatus for Measuring Nanostructured Heat and Fluid Flow | Researcher

- Researched and developed theoretical analysis of two-phase fluid flow and heat transfer through microchannels
- Investigated and manufactured test section to evaluate heat transfer and pressure drop behavior when coated with nanostructures

- Engineered flow boiling loop for future experimentation by The Multiscale Thermofluidics Laboratory under a \$3,000 budget

#### **Hess Undergraduate Scholars Research**

*Slip Flow Over Biotemplated Superhydrophobic Surfaces* | *Researcher* 

- Developed theoretical analysis of fluid mechanics for comparison with experiment

- Researched and manufactured a microchannel to evaluate pressure drop when coated with Tobacco Mosaic Virus successfully reducing pressure drop by 61.3% after coating three walls of the channel this translates in energy reduction as the pump applies less force to achieve the same fluid velocity

## **Introduction to Cad/CAM**

*Horseshoe Crab* | *Designer* - Developed theoretical analysis of horseshoe crab mechanism using Pro/ENGINEER based on stakeholder needs - Fabricated product prototype Philadelphia, PA

# **Engineering Design Lab III**

Manual Transmission (http://du2012-grp002-03.blogspot.com) | Designer

## SKILLS

Language: Native Spanish

Technical: PTC Creo, Solid Edge, LabVIEW, ANSYS, Autodesk (AutoCAD, Inventor), MATLAB, Microsoft Office, Adobe Athletic: International Equestrian Rider, competed in events in Germany, Guatemala, Mexico, United States, and Dominican Republic

# ACTIVITIES

Advisory Board Member, LeBow BRIDGE, Drexel University, 2016 - Present Member, Delta Epsilon Iota, Drexel University, 2015 - Present Member, Pi Tau Sigma, Drexel University, 2014 - Present Member, ASME, Drexel University, 2014 - Present Member, Society of Hispanic Professional Engineers, Drexel University, 2014 - Present Note Taker, Assisted students with disabilities, Office of Disability Resources, Drexel University, 2012 Member, Latinos for a United Campus, Drexel University, 2011 - Present

June 2014 - December 2014

# Franklin, WI

April 2013 - September 2013

# Philadelphia, PA

Philadelphia, PA April 2015 - June 2015

September 2013 - June 2014

# Philadelphia, PA

September 2012 - June 2014

# Philadelphia, PA

September 2012 - December 2012

April 2012 - June 2012

Magna Cum Laude

#### Philadelphia, PA August 2015 - Present

Philadelphia, PA

Philadelphia, PA

June 2015