

## OCTAVIO GOMES DIAZ, BSME, EIT

**OBJECTIVE:** Highly focused recent Mechanical Engineer graduate with experience in MATLAB, AutoCAD, Word, Mathcad, and Excel. Pursuing an immediate position with an innovative and reliable company as a Graduate Engineer.

**SKILLS:**

Result-driven	Excel	Adaptable
Communication	Inventor	AutoCAD
Bilingual	Time Management	Detail-Oriented
Research	Team-Player	MATLAB-Simulink

### RELEVANT EXPERIENCE:

#### Flow-Quip, Inc. – Houston, TX

(Mechanical Engineer Intern)

**10/2019 - Present**

- Assisted with Data entry, Account's reconciliation, and customizing financial reports.
- Organized Internal processes, and updated Operation manual and Processes' Flowchart
- Gathered and analyzed information of Rigs, and created a database that reduces technical research time by 75%
- Developed an Excel VBA application to register and search records of business meetings in 50% less time
- Aided with customers' orders and inquiries as a sales representative

#### University of Texas at Tyler – Houston Engineering Center, Houston, TX

(Team Member – Closed-Loop Fluid Heating System design project)

**08/2018 - 05/2019**

- Researched and evaluated the availability of similar systems for heat exchangers in the market, concluding that there is not a product available in the market that meet the project's requirements
- Designed and tested three prototypes, determining that a system with a mixing chamber is the most effective to control the temperature
- Drew 3D visualization of its segments for pressure analysis and computational fluid simulations, corroborating that the material implemented were able to withstand the city's water pressure of 40 psi
- Simulated the behavior of the fluid temperature change in the mixing chamber, estimating an optimal response time of 30 seconds
- Collaborated along with six design teams to potentially save \$20,000 in mechanical laboratory equipment and improve the conditions to conduct heat transfer analysis, by prototyping an Interchangeable Heat Exchanger system

(Mentor Volunteer – Windmill Competition)

**09/2018 - 10/2018**

- Organized data recording for 200 students ensuring proper documentation
- Trained 200 of students by disseminating windmill and potential causes
- Taught principles of aerodynamics to high school students
- Increased the knowledge and interest of 1,600 high school students about STEM career

(Data Collection Volunteer – Popsicle Bridge Competition)

**03/2018 - 04/2018**

- Organized the data recording and testing stations
- Collaborated with four organizers to prepare the testing sensors and recorded bridges' maximum load
- Educated 900 high school students about structural integrity and design process

#### Houston Community College, Houston, TX

(Teacher Assistant)

**09/2016 - 11/2016**

- Provided six hours of tutoring to five students of an Engineering Dynamic course all passing with 100%
- Improved the students' performance and understanding of the course material

### EDUCATION:

#### University of Texas at Tyler

**08/2017 - 05/2019**

Bachelor of Science in Mechanical Engineering with concentration in Control Engineering

GPA:3.39

#### Texas Board of Professional Engineers

**07/2019**

Engineer-in-Training Certification