

# Julio Garza

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## EDUCATION

### Texas A&M University

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING, GPA: 3.2/4.0

College Station, TX

May 2020

## EXPERIENCE

### Turbomachinery Lab

FLAME SPEED GROUP STUDENT TECHNICIAN/RESEARCHER

- Provided aid to PhD students with experiments and conducted supplemental research and analyses in Flame Speed Group.

College Station, TX

Feb. 2020 - PRESENT

### Shell Eco Marathon Competition

SENIOR DESIGN CAPSTONE PROJECT

- Designed, fabricated, and tested a fuel-efficient internal combustion car for the 2020 Shell Eco-Marathon competition. Iterated design of aluminum car frame, conducted Finite Element Analyses (FEA) to validate selection of final design, and manufactured the frame through coping and TIG welding of members.

College Station, TX

Aug. 2019 - May 2020

### Baker Engineering and Risk Consultants

BLAST GROUP INTERN

- Supported with designing tests for clients and aided in conducting internal research on explosion phenomena. Performed work involving mud plugs, vapor cloud explosions, deflagrations, facility siting studies, safety hazard courses, air sampling systems, blast-proof enclosures, and seat belt pre-tensioners.

San Antonio, TX

Jan. 2019 - Aug. 2019

### Society of Automotive Engineers (SAE)

STUDENT APPRENTICE

- Worked on Texas A&M 2015/16 Formula One cars through Apprenticeship program.

College Station, TX

Aug. 2017 - Dec. 2018

### Society of Hispanic Professional Engineers (SHPE)

WEBSITE COMMITTEE MEMBER

- Managed and redesigned the organization's website as part of the website committee.
- Attended the SHPE 2017 National Conference in Kansas City. Networked with scholars from all over the country and attended company workshops on topics such as professionalism and work ethic.

College Station, TX

Aug. 2016 - Dec. 2018

## SCHOLARSHIPS & AWARDS

### Bill & Melinda Gates Foundation

GATES MILLENNIUM SCHOLAR

- Full-ride scholarship for both, undergraduate and graduate programs, awarded to only 2% of applicants, 1,000 of 50,000, with the purpose of providing opportunities to minority students with significant financial barriers.
- Networked with Gates Scholars at the National Conference in Los Angeles, California. Attended workshops and participated in discussions addressing equal access to educational programs among other issues.

Aug. 2016-PRESENT

### Hispanic Scholarship Fund

HSF SCHOLAR

- Scholarship awarded to exceptional students of Hispanic heritage who demonstrate leadership and a passion for learning.

Aug. 2016-PRESENT

### Aggies Invent Challenge

2ND PLACE & HONORABLE MENTION WINNER

- Competed twice in the Aggies Invent Challenge, a 48 hour competition in which participants work in a diverse team atmosphere on identifying a problem, prototyping a product, creating a business model, a marketing video, and a presentation to be judge by a panel of industry professionals and professors.
- \$250 and Honorable mention winner in "Aggies Invent-Internet of Things" themed Challenge (Oct. 21 2016).
- \$750 and 2nd place winner in "Aggies invent-Bring your Own Idea" themed Challenge (Sep. 18 2016).

Sep. 2016 & Oct. 2016

### Toyota Mobility Challenge

3RD PLACE WINNER

- Competed in an intensive 7 hr. competition to innovate a more inclusive transportation system (Oct. 22 2016).

Oct. 2016

## ADDITIONAL DATA

**Software Skills** Python, C++, Matlab, LabVIEW, SolidWorks, Excel, Word, Powerpoint, Adobe Premier Pro & Photoshop

**Fabrication Skills** Mill, Lathe, MIG & TIG welding, 3D printing

**Other** Fluent in Spanish, astronomy & space exploration enthusiast, and fanatic of mountain biking, hiking, and camping