

# Carlos A. Velazquez

<https://carlosv02.github.io/CV8.github.io/> | velaz.carlos.quez08@gmail.com | (903) 926-7571

## OBJECTIVE

Junior Mechanical Engineering student seeking a challenging internship opportunity for Summer 2024 with a focus on design and manufacturing by applying my academic knowledge and hands-on skills to contribute to cutting-edge projects.

## EDUCATION

**Texas A&M University**, College Station, Texas  
*Bachelor of Science in Mechanical Engineering*

**Graduation:** May 2025  
**GPA:** 3.76/4.00

## EXPERIENCE

**Six – C Fabrication Inc**, Petal, Mississippi  
*Pipeline Laborer*

**June 2023 – August 2023**

- Maintained gas lines in a plant facility for Kinder Morgan using pipeline maintenance tools and precise, robust equipment to ensure product is transported safely to residential and business properties.
- Executed the preparatory phase of the **1.5-mile** construction project by skillfully positioning pipe supports and arranging substantial **46"** diameter pipes along the designated pipeline route.
- Recorded pipe coating information for the pipeline project with precision measuring and test instruments.

**Complete Printing and Publishing**, Carthage, Texas  
*Seasonal Bindery Machine Operator*

**June 2021 – August 2022**

- Operated stamping, stitching, pressing, trimming, and binding machines, effectively overseeing the entire production process and utilizing basic hand tools to ensure the seamless transition to the next job order.
- Oversaw **3** pieces of machinery worth over **500k dollars** applying preventative maintenance techniques to increase uptime and reduce production loss.
- Generated an impressive average of **8-10** job orders per day by consistently delivering orders on time and playing a pivotal role in enhancing overall company efficiency, contributing to a **15%** increase in operational productivity.

**Society of Hispanic Professional Engineers**, Texas A&M University  
*Athletic Representative*

**August 2021 – Present**  
**August 2022 – April 2023**

- Organized all athletic logistics, including SHPE intramural leagues and Get Fit with SHPE for our SHPE Chapter.
- Managed the Workout Community Point System using **Excel** to keep track of **110** members' points.

*SHPEathon Mentor/Judge*

**December 2021 – February 2022**

- Assisted in organizing SHPEathon, a weekend-long competition, by developing the format for over **40** participants.
- Mentored students by facilitating a financial budget, design documents, presentations, and sales pitches.
- Judged presentations for **10** teams and gave feedback on their project overall on the final day of the competition.

## PROJECTS

**Rev's Revenge**

**February 2023 – Present**

- Collaborated with a multidisciplinary team of engineers to develop a **3lb** combat robot for competition.
- Designed robot's armor, wedge, and forks utilizing **SolidWorks** to create a versatile robot and increase attack rate.
- Performed essential repairs on robotic systems to uphold their peak operational condition through test runs.

**MEEN 357 Design Project**

**September 2023 – Present**

- Constructed a mission plan along with **3** other mechanical engineers to land a large mobile robot safely on the surface of Mars and navigate the robot across unknown Martian terrain to points of specific interest.
- Simulated exploration of Mars by implementing engineering analysis such as root finding, numerical integration, curve fitting, solving systems of linear equations, numerical differentiation, and optimization methods in **Python**.
- Programmed **Python** libraries to model the drive system and perform an analysis of its performance characteristics.

**MemAid**

**January 2023 – April 2023**

- Developed an interactive memory game for elderly individuals diagnosed with dementia for a class project.
- Drafted vibrant color-shaped pawns and tetrahedron dice using **SolidWorks** to meet precision standards.
- Fabricated the intricate components project utilizing an **FDM 3D printer** for a travel-size game board.

## SKILLS

**SolidWorks, Python, Microsoft (Word, Excel, PowerPoint), HTML, CSS, JavaScript, Bilingual (Spanish/English)**