# **XAVIER A. GONZALEZ**

McAllen, TX 78501 · (956) 328-9820 · XavierGonzalez1999@gmail.com

# **EDUCATION**

The University of Texas Rio Grande Valley Bachelor of Science in Mechanical Engineering

#### **EXPERIENCE**

# **Health Care Unlimited**

Personal Care Assistant

- Working directly with a private client, on in-home assistance. •
- Perform duties as assigned on Personal Care Service Plan for clients.
- Prepare and maintain records of client progress and services performed, reporting changes in client condition to manager or supervisor.

#### **Texas Pre-Freshman Engineering Program | UTRGV**

Project Coordinator

- Handled all duties for 3 separate sub-groups totaling 300 participants.
- Planned, established, and communicated project deliverables to meet deadlines and maintain project schedules.
- Read and interpret project specifications and logistics by setting schedules, dates, and other information using spreadsheets.

# **Advance Auto Parts**

Sales Key Holder

- Supervised three minimum employees to complete and achieve daily tasks. •
- Responsible for opening and closing the store, completing, and making deposits.
- Warehouse Coordination and transfers of materials between several warehouses.

#### **Goodwill Industries**

Warehouse Manager

- Recorded information, shortages, and discrepancies to keep records current and accurate.
- Verified quantity and description of materials received by checking merchandise against packing list.

#### **Adrenaline Motor Sports**

Parts Manager

- Demonstrated equipment to customers and explained the function of the equipment. •
- Determined replacement parts requited, according to inspections of old parts, customer requests, or customers descriptions.
- Developed internal and external customer relationships negotiate, interact, and manage relationships with auto parts vendors.

### **PROJECTS**

#### Sea Turtle Prosthesis | Sea Turtle Inc.

- Worked alongside a Sea Turtle Rehabilitation center to create a specially made prosthetic for an injured sea turtle.
- Designed a full mechanical prosthetic device through CAD which was fabricated, fitted, and tested.

#### Friction & Wear Analysis of 3D-Printed Filaments

- Research based on a study of tribological properties of 3D printed filaments.
- Performed ASTM standards, G-99 pin on disk testing to determine coefficient of friction for material samples.

#### **Multi-Technology Hybrid Systems**

- Research based on collaborative techniques in additive manufacturing processes.
- Focuses on overcoming weaknesses of manufacturing techniques to improve part quality and part performance.

#### **Arduino Systems**

- Set-up and demonstrate microcontrollers and programs for unique Arduino projects.
- Gained experience with programming and prototyping utilizing electronics and microcontrollers.

# SKILLS

Software: MATLAB, Microsoft Office, Working Model 2D, Autodesk, SolidWorks, Onshape, AutoCAD, Cura, PSpice, Android Studio and Arduino.

**3D Engineering:** Designing, repairing, modifying 3D CAD data, assembling, painting, sanding, managing multiple materials, machine calibrating, repairing, and testing 3D printer, material handling and parts measuring.

Machines: Lathe, SATECH Pendulum Impact Tester, Benchmaster IZOD Notching Machine, Sintech Ultimate Tensile Strength machine, Differential scanning calorimetry, LECO Belt Grinder, IZOD Impact Tester, Blacks Charpy Notch machine, Creality Ender Series, Creality CR and Makerbot Method Series 3D Printers. Languages: Spanish Bilingual.

Graduation Date: December 2022 GPA: 3.0

> Alton, TX Feb 2019 - July 2020

McAllen, TX June 2020 - Present

Edinburg, TX

June 2022 – Aug 2022

McAllen, TX Oct 2018 - Jan 2019

McAllen, TX

Dec 2017 - July 2019