

GUSTAVO RODRIGUEZ

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EDUCATION

University of South Florida

Bachelor of Science in Mechanical Engineering GPA: 3.33

• Relevant coursework: CAD, Statics, Engineering Lab, Thermodynamics, Mechanics of Solids, Materials Engineering.

Tampa, FL

Expected 2028

Leto High School

High School Diploma Weighted GPA: 5.25

Tampa, FL

May 2024

EXPERIENCE

Incoming Engineering/Facilities Intern

May 2026 – July 2026

Lonza Tampa

Tampa, FL

- Selected for a full-time summer internship supporting Engineering and Maintenance operations.
- Will assist with preventive maintenance, inspections, documentation, and equipment checks.
- Will support data collection, root-cause analysis, and improvement projects tied to reliability and safety.

Baker

March 2025 – January 2026

State Flour Bakery

Tampa, FL

- Prepared artisanal breads, pastries, and desserts with precise measurements, timing, and temperature control.
- Monitored fermentation and product consistency across daily production batches.

Line and Prep Cook

September 2024 – March 2025

Union New American (Next Level Brands)

Tampa, FL

- Organized inventory and rotation practices to reduce waste and maintain service readiness.
- Executed detailed food preparation for raw bar, cold applications, and line service in a fast-paced environment.

LEADERSHIP AND RESEARCH INVOLVEMENT

EXO Chair and President

2025 – Present

IEEE EXO, University of South Florida

Tampa, FL

- Lead weekly meetings for a 10 to 15 person team developing a lower-limb exoskeleton.
- Guide research, subsystem planning, and design discussions for hips, knees, and ankles.
- Collaborate with the RRT Lab on project direction and testing priorities.

PROJECTS

Bulls Ice Cream | *Arduino Uno, ESP32, Pixy2, LCD, SolidWorks, 3D Printing*

- Designed and built an autonomous object-following robot with color detection, LCD feedback, and a 3D-printed PLA chassis.
- Integrated wiring, embedded programming, CAD, and sensor interfacing for autonomous and remote operation.
- Built the system as a K-12 educational prototype for sensing, controls, and fabrication.

TECHNICAL SKILLS

Software and Tools: SolidWorks 2025, Arduino IDE, Microsoft Office, MATLAB

Programming and Hardware: Arduino Uno, ESP32, wiring and integration, sensor interfacing, 3D printing

Languages: English, Spanish

Additional: Technical documentation, prototype assembly, CAD for mechanical design, basic woodworking

CERTIFICATIONS AND AWARDS

Certifications: Certified SolidWorks Associate, Certified SolidWorks Sustainability Associate, CITI Biomedical PI, CITI Research Integrity for Senior and Key Personnel, ServSafe Food Safety, NRFSP Food Handler

Awards and Recognition: USF Scholars Gold recognition, ReCF Pre-Engineering and Robotics certifications, Mu Alpha Theta State Math Bowl 2024 Top 5 Team placement, FCCLA Culinary Arts 1st(Districts), 4th(State)