Max Hernandez Guzman

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OBJECTIVE

Enthusiastic mechanical engineer with a hunger for progress. If you need a hard-working, compassionate, and down-to-earth leader with a wide array of experiences, you've found the right person. Seeking mechanical design internship Summer '24.

EDUCATION

Georgia Institute of Technology | GPA: 4.0

August 2019 – Present

• Bachelor of Science in Mechanical Engineering

Expected Graduation: December 2024

WORK EXPERIENCE

Mechanical Engineering Intern | NASA Jet Propulsion Laboratory

May 2023 - December 2023

• Designed mechanical ground support equipment (MGSE) accessories for the Mars Sample Retrieval Lander (SRL).

Customer Experience Sampling Intern | Lenovo

January 2022 - July 2022

- Completed 17 rigorous, 200+ mark product inspections at Lenovo's Product Quality Engineering (PQE) lab.
- Collaborated with international teams and adopted customer perspective to anticipate, analyze, and resolve defects.

MATLAB Teaching Assistant | College of Computing at Georgia Tech

August 2020 – December 2021

- Led a team of 30+ TAs and professors as Head TA (Summer 2021) and Senior TA (Homework Team, Fall 2021).
- Held weekly recitations and office hours, wrote and proofed assignments, and developed team productivity software.

ACADEMIC EXPERIENCE AND PROJECTS

Acoustic Characterization Research | Georgia Tech – Europe

August 2022 - December 2022

- Project Title: Detecting and characterizing microstructures and coatings using scanning acoustic microscopy (SAM).
- Performed SAM experiments to obtain various composites' properties and test lab microscope capabilities.
- Developed data processing algorithms in MATLAB and presented findings through two presentations and a report.

Robotics Competition Team Lead | Georgia Institute of Technology

August 2021 – December 2021

- Managed the team structure, project timeline, and report completion of a group of five for a robotics competition.
- Spearheaded the technical development of the competition robot:
 - o Designed two mechatronic subsystems containing DC motors, pneumatics, and solenoids.
 - Programmed the robot's dynamic control system (C++/Arduino).

Prototyping Instructor | Invention Studio at Georgia Tech

December 2019 – Present

- Volunteering at the largest making community on campus to help users bring their projects to life.
- Empowering users by leading comprehensive tool trainings, providing design guidance, and maintaining equipment.
- 3D Print Apprentice (Spring 2021 Fall 2021) specialized training with focus on advanced 3D printing techniques.

Portfolio Projects | Personal Projects

August 2019 – Present

- Engaging in rapid, iterative prototyping to design solutions for everyday problems using SOLIDWORKS.
- See my Laptop Support, Bike Gear Guard, Headphone Repair, and more in my self-made portfolio at mt.hdez.org.

RELEVANT SKILLS

- CAD/Design: SOLIDWORKS, NX, Teamcenter, Autodesk Fusion 360, AutoCAD
- Programming: MATLAB (Intermediate), Java 11 (Beginner), C++/Arduino (Beginner)
- Software: Microsoft Office (Word, PowerPoint, Excel), HTML 5 and CSS 3, Cura, OOP principles
- Hands-on: Rapid Prototyping (3D Printer, Laser Cutter/Engraver), Workshop Tools (Wood and Metal), Waterjet, Wood and Metal Lathe, Vertical Mill, MIG Welder, Oscilloscope, Scanning Acoustic Microscope, Sewing Machine
- Languages: English (Fluent), Spanish (Fluent), French (Beginner)

AWARDS AND OTHER EXPERIENCES