

Gualberto M. Hernandez Echeverria

(209)270-9698 | Gu4lbert0@gmail.com

Education

University of California Merced

December 2021

Bachelor of Science, Mechanical Engineering

Technical Skills

OnShape	Resin Printing	Python programming	Harnessing
SolidWorks	Tig welding	Microcontrollers	
Easy path CNC lathe	Electronic soldering	Raspberry Pi systems	
Laser cutting	Electronic wiring	Quadcopter pilot	
3D printing	C++ programming	Pneumatic systems	

Professional Experience

Mechanical Engineer

(January 2022 – August 2024)

Milano Technical Group (MTG)

- **Module Sortation Project:**

- Designed and assembled an HMI enclosure, managed the BOM, selected parts, and developed detailed wiring and pneumatic diagrams for the module sorter.
- Led System troubleshooting and integration by analyzing electrical and pneumatic schematics, and collaborating with electrical, mechanical, and software engineers.
- Provided weekly client updates, resolve blockers and technical inquiries to ensure project progress.

- **Gather Robot Project:**

- Served as project lead, Responsible for creating a project proposal, timeline, cost analysis, and engineer assignments.
- As the mechanical engineer, designed the robot chassis, performed part selection for the electrical system and developed the wiring diagram.

- **Heavy Transport Vehicle Project (Woolly):**

- Manufactured shafts for the vehicle using an Easy Path CNC Lathe.
- Assisted in assembly and harnessing of the vehicle's components.

- **Ekejime Machine Project:**

- Designed the pneumatic system, and harnessing.

Engineering support for Auto-Header Height Control equipment (July 2020 - August 2021)

California Sun Growing Company (Morning Star), California

- Installed and managed computer, optical, and I/O systems on harvester equipment, troubleshooting and correcting field issues to ensure optimal performance during harvest season.
- Trained operators and mechanics in best practices for system operation and troubleshooting.
- Documented field conditions and harvester's performance with a DJI Mavic Mini drone, covering a 100+ mile area from Bakersfield to south Stockton.

MESA Labs research on Unmanned Ground Vehicle (UGV)

(August – December 2021)

University of California, Merced- Merced CA.

- Programmed a small, unmanned ground vehicle (UGV) using Python and OpenCV on a Raspberry Pi with ROS, enabling it to follow simulated plant rows.
- Assisted students with troubleshooting and programming electronics for a larger UGV.