Criss Hossam Azer Habashi

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EDUCATION

University of California, Irvine **Irvine, CA**
B.S. in Mechanical Engineering -, Class Standing: Senior June 2024
Honors: Dean's List (5 Quarters): 2020-2021, 2023
Relevant Coursework:
Introduction to Engineering Computations (MATLAB), Computer-Aided Design (Solidworks), Statics, Dynamics, Circuits, Thermodynamics, Fluid Mechanics, Mechanics of Structures, Vibrations

RELEVANT EXPERIENCE

Saratech Homelock Sensor, Irvine, CA

Team Lead/Manufacturing Engineer/ IOT Engineer, October- April 2024

- Worked as part of a six-member team to develop and build a home lock sensor system capable of detecting the locked/unlocked status of doorbell and window locks.
- Successfully miniaturized the microcontroller, reducing the overall dimensions of the housing units to a compact size of 2 inches in length by 2 inches width by 3 inches in height.
- Led the development of a mobile application using Android Studio, integrating with Seeed Studio code for enhanced user experience and control.
- Will expand the app's compatibility to include iOS and to ensure integration with smart home platforms like Google Home and Amazon Alexa.

EngrMae 106 Robotics, Irvine, CA

Electrical/Team Leader, Jan – April 2023

- Acquired substantial expertise in the technical aspects of pneumatic and electrical systems through the development of a robot equipped with rack and pinion steering.
- Designed the robot to navigate a predetermined course autonomously, utilizing infrared sensors for path detection and guidance.
- Designed an efficient wiring diagram to avoid potential issues.

Rechargeable Autonomous Robot, Senior Design Project, Irvine, CA

Mechanical/Coding Team, Jan – April 2023

- Built a robot to track a pre-planned, 2D, collision-free path, minimizing error to 10%.
- Designed automotive parts using CATIA V6 for future automated machinery.
- Programmed the robot with an Arduino-programmed IR sensor to navigate narrow spaces.
- Created the steering mechanism using Solidworks, then used a laser print to reduce 15% cost.

Personal Project

Formula 1 Race Car Design ,

CAD Design, April - June 2022

- Designed an Ferrari F1 race car using SolidWorks, adhering to exacting standards of aerodynamics and structural stability.
- Employed motion analysis to determine the optimal torque output under various configurations.
- Investigated potential differences and benefits between rear-wheel drive (RWD) and all-wheel drive (AWD) motor placements

SKILLS & ACTIVITIES

Technical - MATLAB, Solidworks, Arduino,Catia V5, Circuits 3D Printing, Microsoft Excel, RISC-V, and ARM-C
Languages - English (Fluent), Arabic (intermediate)
Interests - Soccer, Traveling, Working on Cars, Computer