KATHERINE NASIF

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1503 Gilmore Street Mountain View, CA 94040

COMPUTER ENGINEERING STUDENT WITH INTERESTS IN ROBOTICS AND EMBEDDED SYSTEMS

EDUCATION

BS University of California, Los Angeles Computer Engineering Cumulative GPA: 3.8/4.0

Expected June 2024

RELEVANT EXPERIENCE

Founding Member, UCLA Combat Robotics 2021-Present

- Led mechatronic design on a UCLA professor sponsored featherweight combat robotics team.
- Used Solidworks/AutoCAD for CAD/simulations, learned mill/lathe operation, gained Github and GrabCAD experience for hardware and software integration.
- Learned to build and integrate complex robotic systems in a high-pressure team environment

Micromouse Project, IEEE at UCLA, October 2020- March 2021

- Worked with a partner to create a maze-solving robot as a part of IEEE at UCLA.
- Practiced skills such as PCB design in Autodesk EAGLE, PID loop implementation, CAD in Solidworks/Autodesk Inventor, maze-solving flood fill algorithm in C.
- All programming was done using the STM32 Cube IDE on a Nucleoboard in C.

Wearable Motion Detection and Alarm System for Post-Surgical Shoulder Recovery with EmbeddedML on STM Sensortile, Project for Engineering 96C, Fall 2020

- Created a wearable shoulder motion detection system to aid in post-surgical recovery with a built-in alarm system.
- Used Embedded Machine Learning to train for and identify six key shoulder joint motions.
- C programming was done using the STM-ARM-based Sensortile development board.

Beam On Technology, Full-Time Laser Operator, Summer 2020

- Dove into the PCB production industry and was trained as a summer laser operator and technician, creating hundreds of solder stencils monthly.
- Learned high-power laser operation and programming.

PROFESSIONAL AFFILIATIONS

Secretary at IEEE Branch at University of California, Los Angeles 2021-Present

- Managed alumni relations, writing a weekly newsletter that gets sent to over a thousand affiliates each week.
- Leadership experience through managing the Alumni Mentorship program, a program that connects current UCLA undergraduates to ECE alumni in their fields

SKILLS AND INTERESTS

Python, C, C++, Java, STM-ARM Programming, EmbeddedML/Machine Learning, Digital System Design, Robotics, Computer Vision with OpenCV, Documentation, PCB Design, Control Loop Implementation, Computer Aided-Design in Autodesk Inventor and Solidworks, 3D Printing, Manufacturing Processes, High-Precision Electronics Manufacturing, MATLAB