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## CAREER OBJECTIVE

Dedicated to leveraging proven experience with academic success to contribute to company goals. An unparalleled tenacity since childhood to immerse myself within the field in aspiration to further technological innovation!

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## EDUCATION

**MECHANICAL ENGINEERING, MS** | (Controls and Mechatronics)

Graduation: June 2024

**MECHANICAL ENGINEERING, BS** | GPA: 3.87 (Cum-laude)

2019 - 2023

UNIVERSITY OF CALIFORNIA, SAN DIEGO

- **Relevant Coursework:** Signals and Systems, Statics and Dynamics, Mathematical Computation, Programming, Thermodynamics, Material Science, Fluid Dynamics, Solid Mechanics
  - **Clubs:** Triton Robotics (Engineer Lead), Human Powered Submarine, Men's Club Water Polo (President)
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## EXPERIENCE

**HOLOGIC** | R&D (Mechanical and Systems) Engineer - Intern

June 2022 - September 2022

**Precision Instrument System Engineering Project**

500+ hours

- Developed from scratch a precision ultrasonic embedded system instrument to characterize tube height, relieving the duty of a full-time engineer to conduct root cause analysis of an instrument defect
- Trusted with autonomy to select electronic components, develop mechanical design, and program software

**Prototype Development of Next Generation Product**

- Integrated electronic modules into a self designed and assembled functional first-generation prototype
- Showcased to marketing team and other stakeholders, receiving positive feedback on prototype
- Conducted multidisciplinary tasks including software development, hardware integration, and iterative product development based on gathered feedback from external workflow operations

**MORIMOTO'S LAB** | Mechanical Engineer - Researcher

December 2022 - September 2023

**UCSD Soft Robotics Research Lab**

300+ hours

- Prototyped and developed an innovative non-invasive endovascular surgical device in collaboration with a small team of student researchers under the guidance of Professor Morimoto.
- Evaluated feasibility through clinical trials, lab experimentation, literature research, and FEA
- Participated in clinical collaborator meetings to aid in product development and clinical adoption

**VALITUS TECHNOLOGIES** | Mechanical Engineer - Intern

April 2019 - September 2020

**Product Development for Start-up Corporation**

100+ hours

- Contributed to design on Critical AI Security Project for the USAF (United States Air Force)
  - Independently modified, and added final CAD geometry in preparation for mass production injection molding
  - Quickly adapted to company workflow and using foreign file layouts created by international partners
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## TECHNICAL ENGINEERING PROJECTS

**WEARABLE HAPTIC ARM** | Obstacle Avoidance During Teleoperation ([paper](#))

Fall 2023 | 60+ hours

**REVERSE OSMOSIS TESTING RIG** | SDP Sponsored by OceanWell ([portfolio link](#))

Spring 2023 | 200+ hours

**AUTONOMOUS SELF-DRIVING CAR** | Ros2/Python Driven Vehicle ([github](#))

Winter 2022 | 80+ hours

**6DOF ROBOTIC ARM** | Inverse Kinematics Robotic Arm ([portfolio link](#))

2020 - 2021 | 150+ hours

**3D PCB LIGHT CUBE** | 216 LED 3D Cube Light Display ([portfolio link](#))

2020 - 2021 | 100+ hours

**HEXAPOD ROBOT** | 6 Legged 3D Printed Robot ([portfolio link](#))

2017 - 2019 | 200+ hours

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## SKILLS

Solidworks DipTrace MATLAB  
Autocad Python/Java/C++ Ros2  
Mastercam Embedded Systems OpenCV

## AWARDS

SkillsUSA National Champion in  
Auto-Manufacturing Tech. Comp.  
1st Place UCSD Robotic Comp.

## CERTIFICATIONS

Solidworks Mechanical Design  
Professional (CSWP)  
Nvidia DLI Certificate