Kyle Fernan

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PROFESSIONAL SUMMARY

Dedicated and resourceful individual seeking experience in the Engineering design industry to be able to make use of my creative, collaborative, and leadership skills. I have a passion for detail, particularly in research and product design, striving to provide the best possible result for the given task from myself and from those around me as well.

EDUCATION

University of California, Irvine - Irvine, CA *09/2022 - 06/2026*

B.S. Mechanical Engineering, Specialization in Mechanical Design, Minor in Business Management
Cumulative GPA: 3.72/4.0 | Dean's Honors List: Fall 2022, Spring 2023

WORK HISTORY AND EXPERIENCE

Anteater Formula Racing - Irvine, CA *07/2023 - Current*

Human Interface Design Engineer

- Optimizing the race car's seat ergonomics by basing design changes around user feedback and physiological factors (ex. Increasing the height of the seat bottom's walls and the implementation of a bespoke foam cushion to improve driver stability during lateral acceleration without increasing vehicle weight)
- Establishment and maintenance of consistent communications with Electronics, Powertrain, and Chassis subteams to ensure proper placement of necessary support members and prevent bounding box conflicts

UC Irvine Biorobotics Laboratory - Irvine, CA *04/2023 - Current*

Undergraduate Researcher

- Development of a cable-based assistive horizontal stepping robot intended to provide early stage lower limb rehabilitation for spinal cord injured patients. Implemented various elements to improve device function, including a simple spring system to ensure cable tension for proper motor function and smooth leg motion
- Led the design, prototyping, and implementation of a Haptic Simulation Device intended to provide sensation to patients' feet during rehabilitation with the horizontal stepping robot. Placed emphasis upon physiological factors to optimize somatosensory stimulation, accessibility, and comfort for patients and ease of use for therapists
- Analysis and development of the Finger Extension Trainer (FET), a bi-manual rehabilitative device for non-human primates, to find components which can be improved upon, and designing such solutions in Solidworks

Howe Neat Inc. (Agricultural Technology) - Benicia, CA *01/2022 - 09/2022*

Hardware Technician/Intern

- Manual assembly and testing of electronic components
- Set-up and maintenance of 3d printers and Pick and Place machine for production
- Programmed and performed quality checks on circuit boards assembled by automated Pick and Place

Quickly Benicia (Drink Shop) - Benicia, CA *07/2020 - 01/2022*

Assistant Manager/Barista

- Management of communications between business owner and employees
- Training of new hires by leading them through their first few shifts, ensuring their acquisition of relevant skills
- Appointed shift leader, providing the team hands-on assistance with customers when necessary

SKILLS & INTERESTS

- Engineering and Product Design (Solidworks(CSWA certified), FEA, GD&T, DFA, MATLab, C++)
- Extensive experience with fabrication (3D Printing, CNC Machining, Soldering, SMT Component Installation, Manual Composite Layup)
- Proficient in Microsoft Office (Word, Excel, Powerpoint)
- Strong written, oral, and interpersonal communication skills
- Leadership and teamwork skills, comfortable in both collaborative and independent environments