Zander Slavitz

zanderslavitz.com | zslavitz@gmail.com 45 Upper North Terrace | Tiburon, CA 94920 | 415.328.9802

EXPERIENCE

GEMBAH | LEAD MECHANICAL ENGINEER

Winter 2021 - Present | Portland, OR

- Built an electro-mechanical collapsible basketball game. Considered user experience, manufacturability, and safety
- Created an electro-mechanical UV sanitizing product with multi-stage mechanisms to actuate mechanical and electrical components. Engineered product for safety & user-friendly maintenance. Prototyped a functional product
- Engineered electro-mechanical hair iron. Optimized user experience and manufacturability through mechanism design

NAPKIN SKETCH TO PRODUCT | LEAD MECHANICAL ENGINEER

Winter 2019 - Present | Portland, OR

- Concepted, prototyped, and engineered an ergonomically adjustable haptic device to communicate data non-visually
- Engineered an IoT hand sanitizer dispenser from concept to final product. Designed for high volume manufacture,
- ergonomics, user experience, and safety. Sourced hardware & prototyped. Led a team of software and electrical engineers

FUSE INDUSTRIAL DESIGN | LEAD MECHANICAL ENGINEER

Fall 2018 - Summer 2021 | Portland, OR

- Developed ergonomic and manufacturable carbon fiber road cycling shoe in SolidWorks. Considered shoe fit, user experience, and hardware integration. Evaluated assembled 3D printed prototype against competitors' cycling shoes
- Collaborated with industrial designer to engineer a plastic tennis ball & towel holder. Conducted FEA, prototyped, considered ergonomics, conducted DFM review, & evaluated part tolerances in rototmold and injection molded parts
- Designed user-friendly mechanisms in ergonomic office chair to accurately adjust seat height, and to lock chair casters
- Engineered a sealable metal lunch box with an injection molded lock mechanism. Conducted iterative thermal simulations

PLAYCRAFT SYSTEMS | SENIOR MECHANICAL ENGINEER

Spring 2016 - Fall 2018 | Grants Pass, OR

- Collaborated through sketches, CAD renders, and physical prototypes to design and engineer more than 6 new playground products each year. Estimated manufacturing costs for product budget and considered ease of manufacture and assembly
- Led design and engineering of the 2017 Inclusive Merry-Go-Round. Concepted, presented renders, designed for manufacture and safety, and validated strength with FEA. Conducted play test with prototype. 25 sold at \$3,500 in 1 year
- Coded user-friendly play directory to teach users play terminology, to ontologically organize playground products by core criteria (functional, aesthetic, and play type), and to discover new product ideas. Trained executives on directory use

ORBIS WHEEL | MECHANICAL DESIGN ENGINEER

Fall 2015 - Spring | Mill Valley, CA

- Designed and conducted comparative torque, speed, and heat generation tests on electric spokeless and spoked wheel bicycles using a dynamometer, timed evaluations on the road, and computational analysis to deliver results for white paper
- Designed and engineered compact high torque transmission that converted wheelchair lever motion to wheel rotation

RESEARCH

BUCKNELL MECHANICAL ENGINEERING | RESEARCH ASSISTANT

Summer 2013 | Lewisburg, PA

• Coded image analysis algorithms in Matlab and Arduino to automate a remote control (RC) car driving on a virtual track

EDUCATION

BUCKNELL UNIVERSITY

BS IN MECHANICAL ENGINEERING May 2015 | Lewisburg, PA

SOFTWARE

DESIGN SolidWorks, Fusion 360, Blender, Rhino

TECHNICAL

ANSYS, SolidWorks CFD & FEA & PDM, Matlab, Arduino, BLE

MANUFACTURING

DFMA

Injection Mold, Rotomold, Sheet Metal, Stamping, Machining, Weldments, Casting, CNC, 3D printing, Rubber, Rope, PVC Coating, HDPE