

EXPERIENCE

Design Engineer

Freelance

MAY 2015 – PRESENT

Oakland, CA

Working with local entrepreneurs to bring their design concepts to life.

- Created 3D layouts in SketchUp of modular production facility for rural Alaskan communities
- Built cost-efficient display prototypes for electric vehicle charging stations with LEDs, OLED panels and Arduino
- Prepared urban permaculture design proposal for client to present to team and partners

Research Associate

Orthopaedic Trauma Institute

MAR 2015 – MAR 2016

San Francisco, CA

Evaluated novel orthopaedic technologies for medical device companies, surgeons and research institutions to prepare for clinical regulatory submissions and potential clinical use.

- Designed and executed custom ISO standard biomechanical tests for clients to verify mechanical properties of novel medical devices and surgical techniques
- Built testing fixtures with machine shop and custom sensors for use in servohydraulic testing machines
- Interviewed patients and orthopaedic surgeons to optimize clinical experience
- Prepared tools and operated imaging equipment for training sessions with clinicians, nurses and sales representatives in the Surgical Training Facility

Community Manager & Designer

Dance4Healing

NOV 2014 - DEC 2015

Sunnyvale, CA

Managed logistics and led outreach for ongoing dance programs for cancer patients. Recruited, scheduled and onboarded patients, dance teachers and filmmakers for weekly in-person and virtual classes.

- Optimized company business model, program and platform through user surveys, financial projections, and research into integrated technologies
- Conceptualized the virtual dance experience with high-fidelity prototypes
- Managed Mailchimp, Eventbrite, and all social media accounts to grow awareness
- Led crowdfunding campaign and raised \$3k for future programs

Interface Designer & Content Associate

Confihealth

JAN 2014 - FEB 2015

Burlingame, CA

Created a unique online shopping and educational experience for first-time parents to discover baby tech products. Collaborated with a small team of developers, designers and content strategists to curate over 300 products and educational articles, including writing original content.

- Designed high-fidelity prototypes and user research study to drive direction for the product and business
- Interviewed parents & physicians to uncover pain points of pregnancy and parenting

R&D Engineer

NanoNerve, Inc

SEPT 2012 - JULY 2013

Berkeley, CA

Collaborated with neurosurgeons, clinicians, regulatory advisors and potential strategic partners on verification & validation testing, mechanical benchtop testing, manufacturing, and clinical regulatory submissions to deliver nano-patterned grafts to market.

- Developed ASTM standard testing setup to demonstrate burst strength of dural grafts
- Optimized nerve guide and dural graft fabrication for scale-up manufacturing
- Conducted one-week market test to assess dural graft market and developed a go-to-market plan to reach neurosurgeons as early adopters

EDUCATION

MS in Bioengineering (focus on Translational Medicine)

University of California, Berkeley and San Francisco

JULY 2013

BE in Biomedical Engineering

The City College of New York

JUNE 2012

SKILLS

HARDWARE

Rapid prototyping tools

(3D printing, laser cutting, silicone cast molding, Arduino, sensors)

Machine shop tools

(mill, drill press, band saw)

Technical drafting

Servohydraulic testing systems

Optotrak tracking system

Mobile C-arm X-ray system

SOFTWARE

SolidWorks, MATLAB, LabVIEW, OpenSim, ImageJ, SketchUp, Mailchimp, Eventbrite, Asana, Trello

UX/UI DESIGN

UXPin, InVision, Axure, PowerPoint,

Adobe Illustrator

New York EIT Certified #089253

(April 2012)

INTERESTS

High school robotics team mentor

(FIRST team 4159)

Cake decorating

Rock climbing

Sketchnoting