Trina Vana

trinavana@gmail.com | www.trinavana.info

WORK EXPERIENCE

Mechanical & Manufacturing Engineer

September 2016- Present

Zap Surgical Systems, Inc., San Carlos, CA

- Designed tooling and fixtures to streamline manufacturing and ensure quality of critical components for a precision robotic surgical system
- Managed project of implementing internal and external lighting in the system through collaborative efforts with industrial and electrical engineers
- Created custom sheet metal brackets and electrical enclosures to mount and power lighting
- Evolved CAD models and drawings in Solidworks for single components and large assemblies through iterative, hands-on prototyping
- Transitioned R&D efforts to production by creating a document control process, writing work instructions, and establishing partnerships with local and international vendors in China
- Drove 510K readiness effort by maintaining and updating a 3300+ part BOM, developing and implementing test protocols, and drafting design verification reports with the aid of FEA analysis in Solidworks Simulation

Engineering Intern

May 2015 - August 2015

Radical R&D, Portland, OR

- Established key human safety parameters for products ranging from spine surgical tools to posture aids for a small medical device consulting firm
- Created sketches of early product concepts to satisfy defined client specifications
- Determined skin adhesive solution for a sensor device by identifying 5 viable products, drafting formal test protocols, and carrying out initial testing
- Responsible for communicating project progress to clients on a weekly basis

Customer Success Representative

April 2013 - May 2014

Box, Los Altos, CA

- Resolved an average of 80+ weekly technical product issues through effective communication with key clients over email, phone, and screen share
- Collaborated with internal teams in engineering, product management, and design to address broader product issues and influence future development
- Trained new hires as a member of a select on-boarding leadership team

Part-Time Freelance Marketing Consultant Self-Employed

January 2009 - June 2016

- Conducted extensive market research in industries including real estate and recreational outdoor gear to assess product viability in the current consumer landscape
- Analyzed client website traffic data to deduce quarterly trends and guide future efforts
- Designed captivating digital images to drive increased user engagement with Adobe CS

EDUCATION

UCLA, Master of Science

September 2015 - June 2016

Mechanical Engineering, emphasis in Design, Manufacturing, and Robotics

Boston University, *Post-Baccalaureate* Mechanical Engineering

September 2014 - May 2015

UC Berkeley, Bachelor of Arts

August 2009 - December 2012

Molecular & Cellular Biology, concentration in Neurobiology

TECHNICAL SKILLS

MATLAB, SolidWorks, ProE/Creo, COMSOL, Abaqus, Microsoft Office (Excel, Word, Powerpoint), LaTeX, Adobe Creative Suite (Illustrator, Photoshop, InDesign), Arduino, HTML/CSS, rapid prototyping, laser cutting, soldering, basic hand tools, technical writing, data analysis