Trina Vana

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WORK EXPERIENCE

Senior R&D Engineer R&D Engineer July 2019 - Present February 2018 - July 2019

PowerVision, Inc., Belmont, CA

- Developing production and R&D optical metrology software in LabVIEW to collect data; subsequent analysis with the use of SQL and Python
- Designing and validating next generation accommodating IOL: CAD, FEA simulation of compliant bodies, tissue model work, prototyping, advanced manufacturing process development, laser system characterization, conducting usability studies

Mechanical Design Engineer Mechanical & Manufacturing Engineer June 2017 - January 2018 September 2016 - June 2017

Zap Surgical Systems, Inc., San Carlos, CA

- Managed systems-level projects between electrical, mechanical, and design teams
- Created tooling and fixtures to streamline manufacturing and ensure quality of essential components for Zap-X, a robotic radiosurgical system
- Produced Solidworks CAD models and drawings employing GD&T and tolerance analysis on assemblies with complex, 500+ dimension parts
- Led design verification of patient table system with Solidworks Simulation
- Transitioned R&D efforts to production by managing a document control process with Solidworks EPDM, producing 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

Engineering Intern

May 2015 - August 2015

Radical R&D, Portland, OR

- Established key safety parameters for spinal surgery tools and posture sensors
- Sketched and prototyped 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
- Interfaced with clients on a weekly basis throughout the project duration

 $Customer\ Success\ Representative$

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

EDUCATION

UCLA, Master of Science

June 2016

Mechanical Engineering, emphasis in Design, Manufacturing, and Robotics

UC Berkeley, Bachelor of Arts

December 2012

Molecular & Cellular Biology, concentration in Neurobiology

TECHNICAL SKILLS

Solidworks, ProE/Creo, COMSOL, Abaqus, MATLAB, LabVIEW, Python, Microsoft Office suite, LaTeX, Adobe Creative Suite, Arduino, HTML/CSS, mechanical design, technical writing, data analysis, SQL, rapid prototyping, laser cutting, soldering, basic hand tools