

Trina Vana

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WORK EXPERIENCE

Senior R&D Engineer II July 2020 - Present
Senior R&D Engineer July 2019 - July 2020
R&D Engineer February 2018 - July 2019

Alcon (formerly PowerVision, acquired March 2019) | Belmont, CA

- Collaborated with KOLs in the ophthalmic space to establish novel clinical workflows. Managed scope, timeline, and deliverables for associated usability studies conducted through external contractors to support clinical trial submissions
- Built out a pilot line for an early R&D device to grow throughput by 150%; activities included budget management, facilities planning, materials and equipment procurement, and advanced manufacturing process development and optimization
- Directed an agile product testing team of 5 engineers across 2 sites
- Promoted data-driven design decisions with DoEs, root cause analysis, FEA simulations, and automated analysis in Python
- Developed metrology software in LabVIEW and architected database workflow using SQL and Microsoft Access. Facilitated subsequent deployment for production use

Mechanical Design Engineer

June 2017 - January 2018

Mechanical & Manufacturing Engineer

September 2016 - June 2017

Zap Surgical Systems | San Carlos, CA

- Managed systems integration between electrical, mechanical, and industrial design
- Organized efforts with international CMs for final product assembly and distribution
- Produced Solidworks CAD drawings employing GD&T and tolerance analysis on assemblies with complex, 500+ dimension parts
- Led design and verification of 3 degree-of-freedom patient table system with Solidworks Simulation
- Facilitated technology transfer: established Solidworks PDM workflow, released work instructions, and managed 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 safety parameters for spinal surgery devices in accordance to IEC 60601 standards
- Defined client specifications and produced early product concept prototypes for unique textile-based and flexible sensor technologies

Customer Success Representative

April 2013 - May 2014

Box | Los Altos, CA

- Resolved 80+ weekly technical product issues in a hands-on approach with enterprise customers
- Facilitated communication between engineering, product management, and design groups to address large-scale product issues and steer future product development
- Trained and mentored 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

KEY SKILLS

Solidworks, ProE/Creo, COMSOL, Abaqus, MATLAB, LabVIEW, Python, Microsoft Office suite, Adobe Creative Suite, HTML/CSS, project management, Agile methodologies, mechanical design, rapid prototyping, DFX, process development, test method development, data analysis, SQL