

## **STEPHEN LEWIS WILSON**

138 Blaine Street, Apt B | Santa Cruz, CA 95060 | (831) 430-6009 | stephenlw@mac.com

---

### **PROFESSIONAL SUMMARY**

#### **Mechanical Design Engineer – Product Development**

Results-driven Mechanical Engineer with 7+ years of experience in medical devices, robotics, and R&D, specializing in rapid prototyping and hands-on design/build/test cycles. Adept at collaborating across disciplines to deliver integrated solutions in fast-paced, startup-style environments.

---

### **WORK EXPERIENCE**

#### **Johnson & Johnson MedTech: Santa Clara, CA**

##### **Mechanical Design Engineer | Feb 2023 – Jul 2025**

- Contributed to the design and verification of robotic-assisted surgical systems, integrating mechatronic components and electromechanical subsystems
- Spearheaded iterative prototyping and hands-on testing of over 30 custom test fixtures for robotic platforms
- Drove cross-functional integration with software and electrical teams to validate motion and sensing systems
- Applied design for manufacturability (DFM), tolerance stack-up, GD&T, and mechanical design principles to robust fixture development

#### **Cito Medical: Santa Cruz, CA**

##### **Mechanical Design Engineer | May 2017 – Dec 2021**

- Led mechanical design of medical products and test fixtures from concept through pilot builds, focusing on user experience, manufacturing, and industrial design
- Interfaced with clients, vendors, and multidisciplinary teams to meet project goals and compliance standards
- Utilized 3D printing, CNC machining, FEA, and general shop equipment for rapid prototyping and testing in a startup-style environment

- Managed small project teams, led design reviews, and maintained project schedules and BOMs

**Oxford Instruments:** Scotts Valley, CA

**Manufacturing Engineer** | Sep 2016 – Mar 2017

- Implemented production line improvements and created work instructions, test procedures, and production standards
- Designed jigs and fixtures in CAD to support production and improve workflow
- Supported last-minute subassembly design updates and collaborated with production staff for efficient implementation

**FOX Factory:** Scotts Valley, CA

**CMM Programmer** | Feb 2016 – Sep 2016

- Programmed, set up, calibrated, and maintained CMMs to support quality assurance and process improvements
  - Streamlined inspection workflows with automated routines and designed custom gauges
  - Supported engineering and QA with actionable metrology data
- 

## EDUCATION

**Saint Martin's University:** Lacey, WA

Bachelor of Science, Mechanical Engineering | Aug 2011 – May 2015

**University of Duisburg-Essen:** Duisburg, Germany

Business, Economics, German Language | May – Jun 2013

---

## LEADERSHIP & ACTIVITIES

**American Society of Mechanical Engineers (ASME)** – Co-President

- Led student team and managed \$4500 budget to facilitate hands-on engineering activities
- Organized industry panels and campus events to connect students with working engineers

---

## **TECHNICAL SKILLS**

SolidWorks, OnShape, FEA, GD&T, Tolerance Stack-Up, Design for Manufacturability (DFM), Root Cause Analysis, Rapid Prototyping, Electromechanical Assembly, 3D Printing, CNC Machining, MS Office Suite, EIT Certificate (CA)

---

## **INTERESTS**

Mountain biking, trail-building, motocross, tinkering with machines, snowboarding, traveling