

ROBERT LANGER

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EXPERIENCE

Medical Device Engineer, *Medtronic*, Minneapolis, MN May 2023 - Present

- Help design and test implantable heart devices for ongoing clinical trials.
- Work with doctors, regulatory teams, and quality engineers to solve design problems and keep projects on track.
- Create and review mechanical parts and electronic housings in SolidWorks.
- Prepare reports and risk summaries for design reviews with senior engineers.
- Support product testing to make sure devices meet safety, material, and sterilization requirements.
- Executed design verification testing protocols, including fatigue and leak testing

Biomedical Engineer, *Johnson & Johnson MedTech*, Minneapolis, MN Jun 2020 - May 2023

- Designed parts for minimally invasive surgical tools, such as handles, joints, and disposable tips.
- Worked with surgeons and manufacturing and quality teams to meet performance and safety requirements.
- Helped reduce surgical setup time by improving the usability and layout of instrument components.
- Trained junior engineers on CAD basics, design rules, and documentation requirements.
- Authored comprehensive IQ/OQ/PQ (Installation, Operational, and Performance Qualification) protocols for new injection-molded components to ensure manufacturing consistency.

Clinical Engineering Co-op, *Minneapolis General Hospital*, Minneapolis, MN May 2018 - Jun 2020

- Improved reliability of patient monitors and infusion pumps by updating preventive maintenance plans.
- Helped raise equipment uptime by tracking performance and fixing issues quickly.
- Supported safety inspections and kept full compliance with hospital and Joint Commission standards.
- Maintained equipment records, wrote service reports, and organized repair history to reduce future troubleshooting time.
- Worked with hospital staff and outside service teams to keep essential equipment available for patient care.
- Performed electrical safety testing and calibrated diagnostic imaging peripherals

Manufacturing Engineering Intern, *Minneapolis Scientific*, Minneapolis, MN May 2018 - Jun 2020

- Supported day-to-day production of medical devices by troubleshooting simple equipment issues on the line.
- Updated work instructions, part drawings, and small fixture designs under senior engineer guidance.
- Collected basic production and test data to help identify yield or assembly issues.
- Helped run small validation tests to confirm components met required specs.
- Assisted technicians during prototype builds and documented results clearly for engineering reviews.

EDUCATION

BSBME, *University of Minnesota*, College of Science and Engineering May 2018

SKILLS

- **Design:** SolidWorks, AutoCAD, Fusion 360, Creo, GD&T, FEA, 3D Printing, DFM/DFA, Prototyping
- **Analysis:** MATLAB, Python, LabVIEW, Statistical Analysis, Excel