# John James Reider

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#### **EDUCATION**

## UNIVERSITY OF MICHIGAN | COLLEGE OF ENGINEERING | ANN ARBOR, MI

- o Biomedical Engineering BSE May 2021
  - o Concentration Electrical Engineering
- o GPA: 3.70 Magna Cum Laude

# MIAMI UNIVERSITY | COLLEGE OF ARTS AND SCIENCE | OXFORD, OH

o Biomedical Science MMSc Expected August 2025

#### **WORK EXPERIENCE**

# QUALITY ENGINEER|ENDRESS+HAUSER OPTICAL ANALYSIS | NOVEMBER 2022-JUNE 2024

- o Process owner of gage calibration, non-conforming product, and material review quality processes
- o Facilitate 8D problem solving aimed at improving internal processes and resolving customer complaints
- o Spearheaded PIP project, bringing formal structure to the receiving inspection process for 600 parts
- Contributed as quality representative to the successful launch of a MFC flow cell project, collaborating with design engineering to ensure adherence to quality standards and operational efficiency
- o Led the implementation of new CMM programs for receiving inspection functions
- o Reviewed standards to implement delta-Ferrite testing and reporting for ASME BPE certified probes
- Oversaw supplier corrective actions to enhance product quality and supplier performance
- o Implemented novel final quality checkout process that reduced out of box failures by 20%

## SYSTEMS TEST ENGINEER | RBC MEDICAL INNOVATIONS | OCTOBER 2021-NOVEMBER 2022

- o Responsible for deliverables including test plans, test protocols, trace reports, and data reports
- Mastered benchtop testing equipment including oscilloscopes, multimeters, and function generators
- o Provided input to feedback loop for design phase of medical devices, concentrating in PEF generators

# **WORK PROJECT EXPERIENCE**

Galaxy Medical CENTAURI PEF Generator

- o Learned generator concepts quickly in order to work independently
- Created and led review of "software of unknown provenance" documentation
- o Assisted in the creation of regression test plan document and traceability matrix

#### Cardinal Health Grizzly SCD

- o Promoted to lead test engineer on project after being on the project for one month
- Conducted code reviews of controller software and executed board level testing of the main PCBA
- o Communicated with client to provide updates on test progress and bug fixes

### Galvanize Therapeutics Aliya 3.0 PEF Generator

- o Reported on generator output data which led to updates of the software compensation curves
- o Developed approximately 200 test cases to verify requirements for new software UI functionality

#### UNIVERSITY COURSEWORK EXPERIENCE

## Drug Eluting Hip Implant

- Researched and designed a rhBMP-2 eluting hip implant for total hip arthroplasty
- o Performed engineering analyses with COMSOL Multiphysics to design and verify eluting matrix *Biomedical Design Lab* 
  - o Constructed a three-lead electrocardiograph using basic circuit components on a breadboard
  - Applied LabVIEW to process pulse oximeter signals and display oxygen saturation
  - Designed circuitry and firmware to process electrooculogram for ocular control of a toy car

#### Other Activities

- o Recreational league soccer
- University of Michigan Alumni Club of Greater Detroit
- o Volunteer at Corewell Health Royal Oak hospital