

Mark Jordano Madland

mark.madland@gmail.com

Summary: Experience in manufacturing engineering, manufacturing support technology, and process validation across industries, including aerospace, electrical and the medical device industries. Focuses on technology and process improvement. Excels in creative problem-solving to unravel complex problems and develop cost-effective solutions. Picks up new concepts quickly. Data mining skills, strong mechanical aptitude, and attentive to detail. Communicates and collaborates well with team members and superiors.

Professional Experience

Sep 2022—Present

Principal Manufacturing Engineer

Burke Porter Group-Medical and Life Sciences

- Medical device and pharma combination product contract manufacturing support and validation
- Quality System procedure development

Jan 2021—Sep 2022

Lead Digital Factory Engineer - Electrical Sector

Eaton, Cleveland, OH

- Led projects to deploy OEE (Overall Equipment Effectiveness) automatic data collection solutions and other Industry 4.0 technologies at multiple sites.
- Accomplishing connectivity on many vintages of machines getting maximum data while preserving cybersecurity

May 2019—Dec 2020

Lead Advanced Mfg. Engineer - Industrial Sector

Eaton, Cleveland, OH

- Deployed and supported DNC (Distributed Numerical Control) systems for CNC program management and machine communication and monitoring across eight plants
- Demonstrated learning agility to quickly master relevant logic, data, schematics, analytics to configure sustainable solutions

March 2018—May 2019

Senior Manufacturing Engineer

Aero Fluid Products, Painesville, OH

- Solved myriad issues in high-mix low volume production
- Lead transition of facility from paper to electronic routers

July 2016—December 2017

Senior Manufacturing Engineer

Medtronic Energy and Components Center, Brooklyn Center, MN, on Continuous Improvement Team for the Batteries Value Stream

- Developed lean workflow and equipment for new production line
 - Led equipment development part of project, guiding team members, and setting standards
- Designed new CVG division common equipment HMI (which was awarded)
- Characterized component fit-up variation and processability

for design changes.

Aug. 2013—June 2016

Manufacturing Engineer

Medtronic Energy and Components Center, Brooklyn Center, MN, on Continuous Improvement Team for the Batteries Value Stream

- Perform process development in highly regulated environment
 - Saved \$30k annually in labor by reducing rework on filling operation
- Execute equipment qualification, process characterization, test method qualification and measurement system analysis
 - Designed and built filling equipment for 2x throughput
 - Discovered \$100k annual trade-off opportunity between scrap at different steps by characterizing new range of joining process parameters.
- Conduct data analysis and root cause analysis
 - Saved \$86k annually in scrap with process changes to a released process. Uncovered previously unknown role of material strength in press fit process and its interactions.
- Support and improve battery production lines
 - Saved \$17k annually in labor by increasing efficiency on packaging operation. Removed redundant steps, reduced cycle time from 7 to 3 minutes
 - For multiple lines, helped re-balanced work and implement lean manufacturing systems. Saved up to \$225k annually in labor and \$225 in inventory per line.
 - Increased worker safety by re-designing workstation to eliminate opportunity for broken glass.
- For all projects, completed rigorous documentation as needed for FDA submission

Sept. 2011—Aug. 2013

Process Development Engineer

Medtronic Energy and Components Center, Brooklyn Center, MN

- Contract position through Populus Group and Keystone Computer Solutions
- Qualified battery coiling, sealing, leak testing, electrolyte filling processes

Education

2011

B.S. University of Minnesota, Twin Cities
Major: Astrophysics

Awards

2014

MECC Achiever Award, Medtronic

2003

Eagle Scout, Boy Scouts of America

Other Work Experience

Summers 2001—2011

Camp Counselor/Staff

Many Point Scout Camp, Ponsford, MN

- Helped kids to learn and grow

- Trained staff lifeguards
- Supervised small teams

Apr. 2007— Jul. 2012

Bicycle Mechanic

Freewheel Bike, Minneapolis, MN.

- Performed advanced repairs and customer service
- Trained new mechanics

Dec. 2008— Jun. 2010

School Bus Driver

First Student, Plymouth, MN

- Supervised hundreds of children

Additional Skills

Proficient in Microsoft Excel VBA, Word, PowerPoint, Teams, SharePoint, PowerBI, Minitab, JMP, Mathematica, IDL, Solidworks, Cimco. Familiar with Verilog, LabWindows, C++, Creo. Experienced in DRM, Lean Manufacturing, Six Sigma, 5S, Kepner-Tregoe Decision Making.