Quinton Mitchell

Manufacturing Engineer

- Results-driven Manufacturing Engineer with 6 years of experience optimizing production processes in automotive and aerospace manufacturing environments
- Proven track record of implementing lean manufacturing principles and automation solutions, achieving cost savings exceeding $2.1M annually
- Expert in bridging design engineering and production operations, with hands-on experience in CNC programming, robotics integration, and statistical process control
- Six Sigma Green Belt certified with expertise in IATF 16949 and AS9100 quality systems

Phone:	**(555) 234-5678**
Address:	**Detroit, MI**
Website:	**https://linkedin.com/in/quintonmitchell**
Email:	**quinton.mitchell@email.com**

WORK EXPERIENCE

March 2021 - Present

Precision Automotive Components

Senior Manufacturing Engineer

Lead manufacturing engineering initiatives for $75M production facility producing transmission components for major automotive OEMs

- Redesigned automated assembly line for CVT components, reducing cycle time by 28% and achieving $850,000 in annual labor cost savings
- Implemented predictive maintenance program using IoT sensors and data analytics, reducing unplanned downtime by 42% and saving $320,000 annually
- Led cross-functional team of 15 to develop and validate new machining processes for aluminum transmission housings, improving first-pass yield from 78% to 94%
- Designed custom fixtures and tooling using GD&T principles, reducing setup time by 35% and eliminating $180,000 in annual rework costs
- Managed $1.2M capital equipment installation project, completing commissioning 3 weeks ahead of schedule and under budget

June 2019 - February 2021

AeroTech Manufacturing

Manufacturing Engineer

Optimized manufacturing processes for aerospace structural components in AS9100-certified facility

- Conducted comprehensive time studies across 12 machining centers, identifying bottlenecks that when resolved increased overall equipment effectiveness (OEE) from 72% to 88%
- Developed and implemented statistical process control systems for critical dimensions, reducing DPPM from 450 to 85
- Created visual work instructions using SolidWorks Composer for complex assembly processes, reducing training time by 45% and eliminating $125,000 in annual quality escapes
- Led 8D root cause analysis for critical supplier quality issue, implementing permanent corrective actions that restored on-time delivery to 99.2%
- Programmed and optimized CNC machining operations for titanium aerospace components, reducing material waste by 22%

August 2018 - May 2019

Industrial Solutions Corp

Manufacturing Engineer I

Supported manufacturing operations for industrial equipment production facility

- Implemented cellular manufacturing layout for hydraulic cylinder assembly, improving throughput by 38% within 4 months
- Conducted kaizen events focused on setup reduction, achieving average changeover time reduction of 55% across 8 production lines
- Developed standard operating procedures for new product introductions, reducing launch timeline by 25%

- Collaborated with quality team to implement mistake-proofing solutions, reducing defect rate from 2.8% to 0.6%

EDUCATION

May 2018

Michigan State University
Bachelor of Science in Manufacturing Engineering

GPA: 3.7/4.0 Relevant Coursework: Manufacturing Processes, CAD/CAM, Quality Control, Production Planning, Lean Manufacturing, Automation Systems Senior Capstone: Designed automated inspection system for automotive brake components, reducing inspection time by 60% and improving defect detection accuracy to 99.8%

TECHNICAL SKILLS

CAD/CAM & Design
- SolidWorks (Advanced), AutoCAD, CATIA V5, Mastercam, SolidWorks Composer

Simulation & Analysis
- Arena Simulation, Minitab, ANSYS, Process Simulate, JMP Statistical Software

ERP/MES Systems
- SAP PP/QM modules, Oracle Manufacturing, Epicor ERP, Wonderware MES

Lean/Six Sigma
- Value Stream Mapping, DMAIC methodology, Kaizen facilitation, 5S implementation, SMED

Manufacturing Technologies
- CNC programming (Fanuc, Haas), Robotics (FANUC, ABB), PLC programming basics, CMM operation

Quality Systems
- IATF 16949, AS9100, ISO 9001:2015, APQP, PPAP, FMEA, MSA, SPC

CERTIFICATIONS

2020

Six Sigma Green Belt
American Society for Quality (ASQ)

2019

Certified SolidWorks Professional (CSWP)

2021

IATF 16949 Internal Auditor Certification

2023

Industrial IoT and Digital Manufacturing Certificate
MIT Professional Education

AWARDS AND RECOGNITION

2023

Manufacturing Excellence Award
Precision Automotive Components

Recognized for implementing automated quality inspection system, reducing defects by 35% and saving $400,000 annually

2020

Continuous Improvement Champion
AeroTech Manufacturing

Led cross-functional team in facility-wide lean transformation, achieving $275,000 in annual cost savings

2019

Outstanding New Engineer Award

Industrial Solutions Corp

Achieved fastest time-to-impact for new engineering hires through successful kaizen leadership

PROFESSIONAL DEVELOPMENT

Society of Manufacturing Engineers (SME) Membership

Detroit Chapter

Active member of Society of Manufacturing Engineers (SME) - Detroit Chapter

IMTS Attendance

International Manufacturing Technology Show

Regular attendee of IMTS (International Manufacturing Technology Show)

Advanced Training

Industry 4.0

Completed advanced training in collaborative robotics and Industry 4.0 implementation

Volunteer Mentor

Michigan State University

Volunteer mentor for engineering students through Michigan State University alumni program