MATT-SALE HOWELL

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OBJECTIVE

A professional position in advanced technology industry that will utilize my skills, industry knowledge, and business acumen, acquired through work experiences and higher education.

WORK EXPERIENCES:

NTID Regional STEM Center

Decatur, AL 2020 - Current

Mechatronic Engineering for Leadership in Deafness

- STEM outreach trainer for the Deaf and Hard-of-Hearing teachers and students encompassing 48 United States. I prepare, plan, administer, teach, and train through conferences, workshops and classes.
- STEM subjects include but are not limited to:

SolidWorks CAD

Drones

Vex VRC Robotics

• 3D Printing

• Underwater ROV

Vex IQ Robotics

• 3D Scanning

• Raspberry Pi

• Drone and underwater ROV competitions for the Deaf and Hard-of-Hearing students

North Carolina School for the Deaf

Morganton, NC 2018- 2020

Automotive Technology & Design Engineer Teacher

• Prepared, planned, administered and taught automotive & engineering courses

Automotive:

- Upgraded automotive equipment and tools to match work field usage
- Organized classroom and shop in a manner that is conducive tolearning
- Instructed students on the appropriate use of safety guards, machines and equipment
- Guided students in selection of appropriate elective projects and experiments
- Developed program to offer NC3 certifications in Wheel & Alignment Service field

- Design Engineer: Upgraded all classroom computers specification to today's demands
 - Established SolidWorks Professional CAD on all computers
 - Simulated daily class into engineer project perspective instead of traditional classroom activities
 - Use 3-D printer for prototypes on all students' designs

Robotic:

- Coached Robotics team to Excellence, Champion and Design Awards
- Consulted on robotic projects including design & programming
- Participated in Vex World Competitions

Detroit Speed & Engineering

Mooresville, NC 2014-2018

Quality Control Manager

- Oversaw Quality of automotive products at receiving, CNC machine, fabrication, and assemble areas
- Developed and established Quality Management System for Detroit Speed's products and procedures
- Launched First Article Inspection procedure to use with SolidWorks Inspection merging with engineer's designs
- Member of engineer team in Research & Development on automotive products
- Researched, analyzed, and developed proposal for new and/or upgrade automotive products
- Identified, diagnosed, and repaired failed automotive products
- Designed custom automotive products for custom project cars

Motorsports Innovation Defense Solutions / JRi Racing Shocks

Mooresville, NC 2009-2014

Quality Control Manager

- Started as Design Engineer position designing detailed 3-D models for full vehicle and vehicle accessories including suspension, brake, hydraulic and cooling systems
- Promoted to Quality Manager Position
- Oversaw and operated Quality Management System including of products and procedure
- Developed and maintained with ISO 9001:2008 Certificate
- Developed and Managed Quality Control Department including three Quality Control technicians
- Participated as member of military vehicle engineer team
- Researched, analyzed, and developed proposals for part upgrades
- Oversaw shock dyno tests and results
- Assembled and disassembled military, high performance, and racing shock products
- Identified, diagnosed, and repaired failed shock products
- Tested prototypes to assess operating functions and determine if goals are achieved
- Reviewed parts to assess fit and provided recommendations for maximum performance outputs

PAGE 1



EDUCATION

Rochester Institute of Technology Rochester, NY 2022

Degree: Master of Science

Major: Master of Science in Secondary Education

GPA: 4.0/4.0

NASCAR Technical Institute Mooresville, NC 2009

Major: Automotive / NASCAR / Ford FACT Technology

GPA: 4.0/4.0; Attendance: 100%

Rochester Institute of Technology Rochester, NY 2002

Degree: Master of Science

Major: Computer Integrated Manufacturing

GPA 3.0/4.0

Rochester Institute of Technology Rochester, NY 2000

Degree: Bachelor of Science

Major: Mechanical Engineering of Technology

GPA 3.1/4.0

Rochester Institute of Technology Rochester, NY 1996

Degree: Associate in Applied Science Major: Electromechanical Technology

GPA3.3/4.0

SKILLS

leading high-performing teams

collaborative practitioner

innovative leader

fosters teamwork

strong emotional intelligence

TECHNOLOGY

AutoDesk Fusion 360
CorelDRAW

Pro/ENGINEER Wildfire
DRAWEdition

SolidWorks Professional
Visual Studio

ProModelAdobe Photoshop

VXelements
Adobe Pagemaker

Simulations
Program Logic Controller
Adobe Illustrator
Adobe Premier

• C/C++ • Microsoft Office Suite

CERTIFICATIONS

• Drone Pilot License 107

• ASE A1 Engine Repair

• EPA 609 Certification

• ALLDATA Certification: Information Specialist Program

HONORS & ACHIEVEMENTS

• Rochester Institute of Technology Director's Honor List

NRSC Graduate Scholarship

NASCAR Technical Institute Director's Honors List

• NASCAR Technical Institute Student of Course: Electric & Undercarcourses

• NASCAR Crew Chief Award in Automotive: Powertrain course

NASCAR Live Your Passion Scholarship

• NASCAR Technician of Tomorrow Tuition Scholarship

• Maurice and Maxine Forman Scholarship

• RIT Graduate Scholarship

• Delta Sigma Phi Fraternity