

# RITCHIE

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## SUMMARY:

Goal oriented person with a strong background in Manufacturing. Actively seeking a co-op/intern position in Manufacturing Engineering/ Process Development. Available May - December 20xx

## EDUCATION:

**Rochester Institute of Technology, Rochester, NY**

Master of Science in Manufacturing and Mechanical Systems Integration

**August 20xx**

**GPA: 3.79**

**Savitribai Phule Pune University, Pune, India**

Bachelor of Engineering in Mechanical Engineering

**(August 2010 -May 20xx)**

**Distinction**

## COURSEWORK:

Six Sigma for Design and Manufacturing, Controls for Manufacturing Automation, Robots & CNC in Intelligent Manufacturing

## SKILLS:

**Software:** Nx CAD, AutoCAD, DataMan (Cognex Scanner Software).

**Strengths & Tools:** Root Cause Analysis, Troubleshooting, Problem Solving, Critical Thinking, leading Cross-Functional Team, Time Management, Minitab, Lean Six Sigma, Data Collection and Interpretation, PFMEA, Project Management, Systems Engineering, Design of Experiments (DOE), Product Lifecycle Management and Conceptual Design

**Hands On:** Laser Marking Equipment for Hypoid Gears.

## WORK EXPERIENCE:

***College Co-op (Traceability) at American Axle and Manufacturing (AAM), Three Rivers, MI (January 20xx – July 20xx)***

- As a manufacturing engineer, responsible for supporting the installation/launch of Laser Marking Equipments and Scanning Stations for Hypoid Gears.
- Engaged in tracking action items, marking/scanning effectiveness and lessons learned, identifying root cause of scan failures, and training operators to mark and scan gears at multiple processes.
- Bringing manufacturing cultural change among plant associates and plant operators in adopting new processes.
- Testing laser marking equipments post upgradation work.
- Carrying out operation checks on a daily basis post implementation.
- Successfully supported installation and set up of scanning stations at Mexico plant.

## PROJECTS:

***Abnormal Noise Analysis of RT-1 Axle Dive Head, AAM***

**(July 20xx - July 20xx)**

- Entire drive head assembly was tore down and its respective parts dimensions and profiles were checked using CMM, P-65 measuring machine and measuring gauges.
- Cause and effect diagram was constructed to identify the potential causes of problem and finally one child part (Driving Helical Gear) was found to be out of specification.
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***Product Failure Analysis -Microsoft Zune, RIT, Concept Design & CPM***

**(January 20xx – May 20xx)**

- Various Tools were used to address the problems and to redesign the concept.
- QFD was used for collecting the customer requirements and House of Quality was prepared.
- TRIZ methodology was employed for understanding the problem and generating innovative solutions for the same.
- DFX methodologies were used to tackle the remaining issues and a new concept design was created.

***Process Improvement of a Centreless Grinding Machine, AAM***

**(August 20xx – March 20xx)**

- Carried out process validation of the former Centreless Grinding Machine.
- Discovered problems associated with the former Centreless Grinding Machine.
- Identified cause of problems using Ishikawa Analysis.
- Implemented the improvements leading to process capability improvement ( $C_{pk} > 1.33$ ), ease of set up by removing the skill required to do the set up by introducing 9 CNC axes in the new machine in lieu of 4 CNC axes in the former machine.