

SHUBHAM JAIN

srjain@mtu.edu | [LinkedIn](#) | [Website](#) | (C) (906)231-4191 | Houghton, MI

SUMMARY

Mechanical Engineering Graduate student with a year of experience in the manufacturing industry. Seeking work opportunities for Manufacturing, Design & Quality roles starting Fall 2020.

WORK EXPERIENCE

Manufacturing Engineering Co-op, Whirlpool Corporation, Amana, IA, USA **Jan '20 – Present**

- Working on Kaizen projects by targeting 0 Defect conditions with potential savings of about \$1.5M savings annually.
- Modified pallet design for a pre-foam door conveyor system which reduced scrap due to handling dents by 6 doors per day and overall saving ~\$6k/week.
- Improved installation of gaskets onto plastic door liners by making a Poka Yoke fixture which reduced the cycle time by 10 sec, which is significant as there's a production rate change being planned

Quality Engineering Intern, Indian Railways, Pune, India **Apr '18 – May '18**

- Evaluated failure reports of diesel locomotives using fish-bone diagrams & discussed solutions to minimize downtime
 - Suggested layout changes of power assembly division which reduced worker movements by 10%
-

ACADEMIC PROJECTS

Airplane Production Simulation using Lean Manufacturing, MTU **Jan '19 – Apr '19**

- Simulated 3 production runs of paper planes while continuously reducing cycle time using JIT & Kaizen activities
- Successfully achieved target *takt* time with fewer operators and managed inventory using Value Stream Mapping
- Standardized the work procedure for repeatability and improved accuracy by employing Poka Yoke

Additive Manufacturing of a Product Targeting the Consumer Market Segment, MTU **Jan '19 – Apr '19**

- Eliminated assembly time and reduced overall production time of a gear train for a wristwatch
- Manufactured the product using only a third of the budget and costing 78% cheaper than traditional manufacturing

Quality Control using Statistical Methods, MTU **Aug '18 – Dec '18**

- Implemented control chart technique (SPC) & identified root causes in simulated data
- Performed Process Capability study & recommended corrective measures towards continuous improvement

Design, Development & Analysis of Aerodynamics of a Car, SPPU **Jul '17 – Jun '18**

- Reduced overall drag by 14% after simulating aero-body designs iteratively using SolidWorks, Creo & Ansys Fluent
 - Designed radiator ducts for better cooling efficiency and reduced core size of the radiator itself
 - Increased the negative lift (downforce) by using an undertray ("*venturi*" like diffuser) to improve cornering speeds
-

ENTERPRISE EXPERIENCE

Team VAMOS Autocross *University Enterprise building F1 style prototype to participate in FSAE events in India & Japan*

Deputy Captain **Aug '17 – Jul '18**

- Implemented jigs and fixtures for mistake-proofing while assembling (*poka yoke*)
- Performed DFMEA as per DVP for wheel assembly and drive train
- Negotiated sponsorship contracts with partners (*for out-sourced parts*) to cut down on budget by 15%
- Presented virtual business plan and cost report in front of a panel of industry professionals

Chassis & Body-works Lead **Aug '16 – Jul '17**

- Designed 12% lighter space frame chassis in ProE & modelled the outer-body in SolidWorks
- Analyzed different chassis iterations for optimized strength and weight in Ansys Workbench

Procurement Head **Aug '15 – Jul '16**

- Managed raw material and spare parts inventory & practiced 5S in the machine shop
 - Converted 3D solid models to 2D drawings in AutoCAD for machining and documentation
-

EDUCATION

Michigan Technological University (MTU) – Houghton, MI Expected: **August 2020**

MS in Mechanical Engineering | Design & Manufacturing GPA: 3.88/4.00

Savitribai Phule Pune University (SPPU) – Pune, India Graduated: **July 2018**

Bachelor of Engineering, Mechanical Engineering GPA: 3.59/4.00

TECHNICAL SKILLS

Creo | SolidWorks | Catia | NX | HyperMesh | Ansys | OpenSCAD | AutoCAD | MasterCAM | Matlab | Minitab | Visio