DHYEY PATEL, M.ENG

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**PROFILE**

Competent Master of Mechanical Engineering with vital experience as a Junior Design Engineer and strong background in **3D parametric modelling, cutting-edge CAD tools**. Detail oriented individual with fine time management skills, strong organizing skills and work well with deadlines.

**TECHNICAL SKILLS**

* 1+ years of experience in design, development and modelling using CAD tools (**AutoCAD, SolidWorks, PROe-Creo, sound academic knowledge of Catia & Revit**(Part-modelling, Assembly, 3D- Modelling))
* Knowledge of standard automotive components, Familiar with Design for Manufacturability & Assembly (DFMA), GD&T, Blueprint reading, Design Failure mode effect analysis (DFMEA)
* Hands on experience with planning and managing projects.
* Sound knowledge of Manufacturing and Fabrication processes such as Casting, Injection molding, Extrusion, Metal stamping, Punching, Spinning, Bending, Welding techniques and CNC/Lathe machining
* Strong ability with common hand tools, machine tools and common measurement tools and techniques
* Experience in implementation of Lean tools (**VSM, Kanban, 5S, RCA, MODAPTS**) to improve productivity
* Proficient in usage of **Microsoft suite** (Word, Power Point, Access, Outlook, Project, Excel)
* Highly **motivated** and self-directed individual with acute analytical and problem solving skills

**ACADEMIC CREDENTIALS**

**Master of Engineering (Mechanical) May-2016 to August-2017**

*University of Windsor, Ontario*

**Bachelor of Engineering (Automotive) June-2011 to May-2015** *Gujarat Technological University, Ahmedabad, India*

**WORK EXPERIENCE**

**Junior Mechanical Engineer June-2015 to April-2016**

Manoj Industries, Anand, India

(A pioneer in designing tools & Dies, providing manufacturing solutions, product design and Die Design)

* Designed & developed tools, jigs and fixtures (gear shafts, coupling, distance piece, gears, sprocket, housing) using **SolidWorks** with drafting and proper detailing for clients
* Write operation sheets, routing and new product variation requirements.
* Applied six sigma and Lean methodologies to solve problems and improve quality output.
* Did route cause analysis for all non-conforming parts.
* Participated in Quality & Lean manufacturing Kaizen event.
* Worked with cross **functional departments** – quality, maintenance and project management to drive product development & review tooling satisfaction

**Trainee-Engineer (co-op) June-2013 to May-2014**

Akaish Mechatronics Privet LTD. (ELECON Group of Industries) Aanad, India

(A leading firm with more than 30 years of experience in manufacturing of different types of gears)

* Assisted Senior Engineers with development and maintenance of equipment for manufacturing of Gears
* Prepared **2D & 3D drawings** of different components
* Learned Quality Management system- **APQP, PPAP, FMEA**
* Learned and educated with co-workers and operators in **manufacturing and CNC machine operation**

**ACADEMIC PROJECTS**

**Lean Manufacturing Implementation – To Improve the Productivity of Process (Narmco Group of Industry)**

*University of Windsor, Ontario*

* Implemented **lean tools and techniques** (5S, Ishiqawa diagram, 5 why’s, MODAPTS and Kaizen) for the root cause analysis and eliminate non-value added activities (NVA)
* Formulated future state VSM with pull production system, production and withdrawal Kanban system and reduced Work-In Process (WIP) inventories
* Reduced the lead time of the process and **achieved productivity by 10%**

**3D-Modelling of V6 engine**

*University of Windsor, Ontario*

* **Design and Assembled** different parts of V6 Engine using **SolidWorks**
* Perform **motion study** of engine and generated **static stress analysis** as well as the thermal analysis of camshaft and piston
* Created and maintained engine parts database in SolidWorks Enterprise

**Solving the problem of starting motor of Industrial Fork Lift** (Akaish Mechatronics Privet LTD. (ELECON Group of Industries))

*Gujarat Technological University, Ahmedabad, India*

* Detailed analysis of connections of starting motor, engine and alternator
* Removed the fix mounting part of the alternator and design a **“S”** shape key path for the alternator mounting so it can travel on that point as the timing belt loosens
* Management approved on manufacturing the initial designed part and conducted test with successful results

**Rejection Analysis of Casting of Gearbox and Compressor Casings** (FINE CAST PVT.LTD. ANAND, INDIA)

*Gujarat Technological University, Ahmedabad, India*

* Detailed study of major and minor defects of casting process
* Applied **Failure Mode and Effect Analysis** on different casting process
* Prepared a comparison report of **RPN values**
* Proposed to change some of the casting process methods for better results

**ADDITIONAL/VOLUNTEERED EXPERIENCE**

* Active member of SAE(Society of Automotive Engineers)
* Participated in **SAE BAJA** **(Solar Vehicle manufacturing)**organized by SAE in 2015 (worked in Design and Fabrication departments of team)
* Participated in **SAE BAJA** **(All-Terrain Vehicle manufacturing)**organized by SAE in 2015 (worked in Design and Fabrication departments of team)

**PUBLICATIONS**

* Resolving a starting problem of forklift – A Technical Research
* Issued in **IJSTE**(an international journal), volume 2, Issue 9, March-2016
* Rejection analysis of casting of Gearbox and Compressor casing – A Research Analysis
* Issued in **IJSTE**(an international journal), volume 2, Issue 11, May-2016

**REFERENCES AVAILABLE UPON REQUEST**