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|  | **Prabagaran .G**  M: +91-8087656340  Email: prabu\_gpgaran@yahoo.co.in |
| PRODUCT DEVELEOPMENT ENGINEER |

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|  | **SUMMARY** |  |
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| * An incisive professional with around 8 years of rich experience in the Automotive industry in New product development, Cost reduction, Localizing, Failure analysis and manufacturing. * Skilled at evaluating customer specifications & transforming the essence into Technical specification and Design Validation Plans. * Good understanding on different manufacturing process like Castings, machining, plastic injection molding and sheet metal processes. * Adroit at optimizing the design by considering FEA analysis results and validation test results. * Proficient in applying GD&T and stack up analysis. * Good in problem analysis by collaborating with cross functional team, judgment and technical decision making skills. * Experience of working with cross cultural and cross functional teams across multiple geographies (UK, US, China & India). * Have International work experience (United Kingdom) for 3 months. |

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|  | **Skill sETS** |  |
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| * DFSS-Six sigma * GD&T * Root cause analysis | * FMEA * Casting and machining * VA-VE | * Pro E * DVP&R * APQP & PPAP |
| * Value package Intro./Change | * Bench marking | * Manufacturing & Assembly |

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|  | **EXPERIENCE** |  |
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| **Sr.Product Engineer-Plant support, Cummins Inda LTD.,** |
| **Chennai — July 2016- Till date**  **On Deputation at Simpson & Co., Ltd.,** |
| Leading engineering activities for Cummins B3.3L (4 cylinder) mechanical engine being assembled at Simpson Co., Ltd., |
| **Responsibilities:** |
| * Lead cross functional aspects of B3.3L engine by coordination with sourcing, manufacturing, supply chain, plant and regulatory teams. * Lead Cost reduction/Localization/Resourcing of major engine components. * Conduct Manufacturing assembly feasibility review for New product introduction and Change. * Responsible to maintain and update New engine build specification and New engine testing standards. * Ensure correctness of Bill of material (BOM) for proto and new development engines. * Support engine testing activities for production engine performance test and new rating developments working along with test engineers. * Liaison between Simpson and Cummins teams (Order Management, Engineering, Quality, Manufacturing and Operations) engineering policies and procedures. |
| **Accomplishments:** | |
| * Reduced cost of Air Intake Connection components 30% by changing its manufacturing process and redesign. (Fabrication to Gravity die-casting) * Developed Piston rings sets, Main bearing cap, Connecting rod and engine support bracket as part of dual source strategy. * Successfully implemented new assembly process tool to assemble BOSCH inline Fuel pump to engine and ensured Right First Time. | |
| **Product Engineer, Cummins Tubo TECHNOLOGIES.** | |
| **Pune — Jun 2012-July 2016** | |
| Design, develop, validate turbocharger for diesel and CNG engines intended for Tie 1/ OEM companies that meet the program budget, quality and vehicle launch timing commitments. (Fixed geometry/Waste gate/Variable geometry) | |
| **Responsibilities:** | |
| * Responsible for supporting new/current product development processes which includes concept engineering, bench marking, basic mechanical design, FMEA, Cause & effect analysis. * Mechanical component design - castings and forged parts from concept to detail design. * Develop Design FMEA to understand risk associated with new design. * Develop and drive the Design Verification Plans and Report (DVP&R) for proving design/product for functionality and reliability. * Review design and technical offer and also participate in technical discussion with vendors. * Provide inputs to drive design iterations based on customer needs and cross functional requirement and filed data. * Lead cross functional Gate /Design reviews and release components to the appropriate phases. * DVA – Dimension variation analysis to ensure the assembly clearance requirements and machining stock requirements. * Support shop operations and plant by providing product engineering solutions. * Develop action plans to anticipate and respond to problems and communicate project status, business issues and significant developments. * Provide guidance to new hire and co-workers regarding manufacturing, testing of designed parts. | |
| **Accomplishments:** | |
| * Proposed a design solution to improve fatigue life of the turbine housing for CNG application and avoided using premium metal grade. * Reduced Turbine housing size by conducting comparative analysis to gain OEM packaging clearance. * Optimized Turbine housing feeder size working with casting supplier | |

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| **Product Development Engineer, INDO-MIM Pvt. Ltd**    **(Formaly know as Gowri Ventures Pvt Ltd)** | | | |
| **Tirupati — May 2010- May 2012** | | | |
| Develop process plan, conduct casting and machining trails for “New Product Development” and launch into production phase for global customers from industries like General Engineering, Medical and Automobile industries. | | | |
| **Responsibilities:** | | | |
| * Responsible for the planning and technical execution of all necessary Product related test & other requirements from first prototypes through product qualification, volume ramp and sustaining * Responsible for analysis of first prototypes, including identification of problems and design marginalities, as well as understanding their root causes * Working with Design, Process and Metallurgical department to translate Product Requirements into Technical Specifications to enable implementation of new features based on customer needs. * Providing the design input like, Shrinkage, stock addition for machining, gauge & fixture design inputs. * Analysis and evaluate designs and give the approval for design. * Making effective time plans to achieve the goal. * Take care of ECN & DCN changes and validate the DCN /ECN. * Audit the supplier place and evaluate the quality system and check the process of the product. * Prepare & maintain statistic reports, PPAP, PFMEA, PFD, Control Plan, Work Instruction and issue document to the concern department per APQP process. * Reporting product status to management, highlighting achievements and risks, and escalating issues as necessary | | | |
|  | **EDUCATION** |  |
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| **GRaduation** |
| **Regency Institute of Technology, Yanam — 2005-2009** |
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| Qualification : Bachelor of Mechanical engineering.  University : PONDICHERRY UNIVERSITY  Percentage : 7.34 CGPA |

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|  | **PerSONAL details** |  |
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| Marital status : Married  Languages known : Tamil , English, Telugu & Hindi  Native Address : #24, West street, Karikalampakkam, Pondicherry  Prabagaran G  Date: 11 September 2018 |