**PERSONAL DETAILS**

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| Employee ID/Name | **:** | **Suhas Gururaj Shetty** | | | |
| Designation | **:** | **Design and Stress Engineer** | | | |
| Date of Birth | **:** | **02nd July 1991** | | | |
| Nationality | **:** | **Indian** | | | |
| Marital Status | **:** | **Single** | | | |
| Passport Details | **:** | **L8362635** | **Date of Expiry** | **:** | **31/03/2024** |
| VISA Status | **:** | **German D Visa** | | | |
| Prior Overseas Assignments | **:** | **GKN Aeroengine - Trollhättan** | | | |

**EXPERIENCE SUMMARY**

**2 years and 6 months of industrial experience in Design, Structural Stress analysis of the Primary, Secondary and Tertiary structures and components of Aircrafts**.

**EDUCATION**

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| * KTH, Royal Institute of Technology, Stockholm   **M.Sc. Aerospace Engineering (Track: Lightweight Structures)**  Relevant Coursework: Lightweight Structures and FEM, Fracture Mechanics and Fatigue, Fibre Composites – Materials and Manufacturing, Fibre Composites – Analysis and Design, Process Modelling for Composite Manufacturing, Advanced Design of Welded Structures, Lightweight Design, Structural Optimization and Sandwich Design.   * MVJ College of Engineering, Bangalore (Visvesvaraya Technological University, Belgaum)   **Bachelor of Engineering in Aeronautical Engineering**  Relevant Coursework: Elements of Civil Engineering & Engineering Mechanics, Mechanics of Materials,  Material Science and Metallurgy, Introduction to Composite Materials, Aircraft Structures, Finite Element Analysis, Theory of Vibrations, Numerical Methods, Kinematics of Machines, Dynamics of Machines and CAD. |

**TOOL EXPERIENCE**

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| Aircraft Structure | Hours | Tools |
| Aeroengine – Composite Structure | 700-800 | Hypermesh, ANSYS and Matlab |
| Other Structural Projects | More than 1000 | Airbus & RR Specific Design & Stress tools |

**AWARDS & RECOGNITIONS**

* Hackathon-Smart city Smart village, Stockholm, 2018
* Group Dance-Kth India Day-2017 and 2018
* Won 3rd prize in Glidowarz and Robo Race held at VertechX-2013 conducted by MVJCE, Bengaluru
* Acquired 3rd place in Water Rocketry organised by Aero Modelling Club of MVJCE in 2013, Bengaluru
* Obtained 3rd prize in Hand Glider held at AVIANO-2013 organised by DSCE, Bengaluru
* Obtained 2nd place in Mock Rock, a cultural contest held at Sargam-2012 organised by NHCE, Bengaluru
* Participated as a Design Instructor (for South Zone Go-KART participants) at NGKC-2014 under ISNEE, Bengaluru

**PROJECTS DETAILS**

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| **Project No: 1** | **:** | **GKN Trollhättan – Composite Stress Analysis** |
| **Project Name** | **:** | **Failure modeling of curved composite beams which involved numerical modeling of failure onset and propagation.** |
| **Client** | **:** | R&D project for Aeroengine Customers at GKN |
| **Role** | **:** | Composite Stress Analysis Engineer |
| **Tools Used** | **:** | Hypermesh, Ansys, Matlab, Python, MS Excel, MS Word, and MS PPT. |
| **Location** | **:** | Trollhättan, Sweden |
| **Employer** | **:** | GKN |
| **Duration** | **:** | 6 months |
| **Project**  **Description** | **:** | ‘‘Failure Modelling of Curved Composite Beams’’ which involved numerical modelling of failure onset and propagation. Numerical Modelling of composite structure was carried out using ANSYS, Hyperworks and MATLAB. Briefly it can be described as follows.  Composite Structural Design and Analysis   * Stress Analysis * Failure Analysis * Failure Progression Analysis |
| **Roles and**  **Responsibilities** | **:** | * Modelling of curved composite beams like aeroengine hot structures * Composite Structural Analysis * Composite Failure Analysis * Composite Failure Progression Analysis * Make sure that the methodology is made to work in GKN workflow * Attempt to validate with the test results * Documentation of the work |

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| **Project No: 2** | **:** | **Quest Global** |
| **Project Name** | **:** | **Wing Structure Concessions and RR aftermarket services** |
| **Client** | **:** | Airbus – UK and Rolls Royce - Derby |
| **Role** | **:** | Engineer |
| **Tools Used** | **:** | Airbus Specific, AutoCAD, RR specific, MS word, MS Excel, and MS Power point |
| **Location** | **:** | Bengaluru, India |
| **Employer** | **:** | QuEST Global |
| **Duration** | **:** | 1 Year 11 months |
| **Project**  **Description** | **:** | Aerostructure - A380, LR and SA wing structure concessions and BR700NG Engine design substantiation. |
| **Roles and**  **Responsibilities** | **:** | * Investigate the non-conformance that is reported * Analyse the damage location based on Airbus standards * Analysis of the structure – Design Calculations, Static and Fatigue criteria’s, Reserve factors etc. * Assess, review and documentation to capture the design solution * Similarly, for RR – Design substantiation sheet to capture the design solution |

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| **Project No: 3** | **:** | **KTH Formula** |
| **Project Name** | **:** | **Composite Design and Analysis** |
| **Client** | **:** | KTH Formula Team |
| **Role** | **:** | Composite Engineer |
| **Tools Used** | **:** | Solidworks, CATIA, Hyperworks and ANSYS |
| **Location** | **:** | Stockholm, Sweden |
| **Employer** | **:** | KTH |
| **Duration** | **:** | 8 Months |
| **Project**  **Description** | **:** | To replace Aluminum Accumulator into composite Monocoque. Also manufactured under-tray, nose cone, rear cover, and seat for ev13 formula car using high performance fibre composites. |
| **Roles and**  **Responsibilities** | **:** | * Composite Structural Design and Analysis * CAD modelling using Solidworks and CATIA - as per the design inputs from the power train * Composite structural analysis – Hyperworks and ANSYS * Documentation of the design and stress analysis for the virtual verification * Manufacturing of the composite parts to the car |