ARUNA NARAYANASWAMY

4, Near bus stop, Hesaraghatta, Bengaluru - 560088 ☎ 6364306430 |
@ arunanarayana89@gmail.com

Design Engineer

- Mechanical Engineer with 3+ years of design and development experience in the Aerospace industry
- Good experience in CATIA V5 (Solid modeling, Sheet metal, Surface modeling, assembly, and drafting)
- Good knowledge of Geometric Dimensioning and Tolerance (GD&T), CAD tool, Finite Element Model(FEM)
- Worked on conceptual design of Main Landing Gear Attachment, feasibility study and conceptual design of wing 90-110 PAX aircraft (NCA)
- Good communication skills, very good team player, leadership qualities and hardworking

---

Skills Summary:

Tools	CATIA V5 R19, Pro/e, Hyper mesh and AutoCAD
Operating Systems	Windows
Project Tools	Microsoft Word, Microsoft Excel, PowerPoint

Education Credentials:

- Bachelor of Engineering in Mechanical ,East Point College of Engineering and Technology, Visveshvaraya Technological University, 2011
- Certified in ANSYS, PRO/E and Hyper mesh

Key Projects:

National Aerospace Laboratories ✦ **Bangalore, India** **Design Engineer (June 2011 – Aug 2014)**

Structural design of Wing (National Civil Aircraft, (NCA-90) :
The Project involves in conceptual design of composite Wing NCA 90, this includes concepts for attachment and structural layout of Wing, with respect to space availability, loads, manufacturing technologies, assembly sequence and weight considerations.

Responsibilities:
- Study of competitive aircrafts
- Structural layout of Wing and material selection
- Design for manufacturing and assembly (composite & Metal)
- Attachment concepts of Wing with Fuselage
- Fitting design including preliminary hand calculation
- Conceptual design of Wing using CAD
- Also conducted Aerospace domain and CAD tool knowledge sharing sessions for newly joined associates

Tools: CATIA V5 R19, Hyper mesh, Pro/e and AutoCAD

National Aerospace Laboratories ✦ **Bangalore, India** **Design Engineer (June 2011 – Aug 2014)**

Structural design of Main Landing Gear (MLG), Beam (Wing rear spar & auxiliary spar) for a civil aircraft:
The Project involves in Conceptualization of various MLG attachment configurations of NCA 90, structural layout of Main Landing Gear with respect to loads, manufacturing technologies, and weight considerations.

Responsibilities:
- Study of competitive aircrafts
- Structural layout of Main Landing Gear
- Lug analysis including preliminary hand calculation
- Material selection
- Structural design and CAD modeling of MLG attachments spars (Auxiliary and Rear spars) and fittings using CATIA V5
- Sizing the spars and attachment fittings by SOM approach and ESDU data sheets

Tools: CATIA V5 R19, Hyper mesh, Pro/e and AutoCAD

Areas worked:
Center and Outer Wings: Chord, attachment, Web rib, Skin panels, rib, Upper internal joint
Main Landing Gear: Fittings, Web, Spars, Bulk head