



# AYANTIKA DAS

## PRODUCT DESIGN ENGINEER

### PERSONAL PROFILE

**Aerospace Engineer** with 4 years of experience in design & development of aerospace products.

Skilled in design and development of aircraft components, CAD & CAM software, CFD analysis, FEM, FVM, Aerodynamics, Thermodynamics, NPD process, manufacturing methods, potential safety and functionality problems and solutions.

### WORK EXPERIENCE

#### Product Design Engineer

Eaton India Innovation Centre |Pune IN| Aug 2017 - present

- New product design and development to innovate cost effective and high-performance products.
- Administering manufacturing processes like Injection Molding, 3D Printing, Additive Manufacturing, Machining, Casting & so on
- Conducting FEA analysis, Vibration analysis using ANSYS.
- Qualification testing of products as per Aerospace standards.
- Working on risk management process using tools like- DFMEA, RCA, 8-D analysis, Monte Carlo analysis & so on.
- Writing technical documents like Test plans, Test reports, FEA analysis reports etc.

### EDUCATIONAL HISTORY

#### Indian Institute of Technology, Kanpur IN

Masters in Aerospace Engineering | 2015 - 2017

- **Relevant Coursework:** Heat Transfer in Aerospace Applications, Finite element methods for fluid dynamics, Turbulence, Finite volume method in heat mass and momentum transfer, Acoustics in fluids, Mathematics for Aerospace Engineering, Aerodynamics- I & II.
- **M. Tech Thesis:** "Finite element simulation of flow in a Y-intake of a supersonic aircraft" , The study of airflow instability in 3D Y-intake at different side slip angle and at different back pressure ratio in supersonic environment. In-house FORTRAN coding used with the help of SUPG (streamline upwind Petrov Galerkin) method, GMRES (generalized minimal residual method) solver, & parallel programming.

#### Bhagwant University, Ajmer IN

Bachelor's in Aeronautical Engineering | 2010 - 2014

### CONTACT ME AT

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### SKILLS SUMMARY

- CAD, Creo, CATIA V5, AutoCAD
- CFD analysis using ANSYS FLUENT, ICEM CFD
- FEM Analysis using ANSYS
- Windows, Linux (Ubuntu)
- C, C++, FORTRAN with open MPI, Matlab
- DFSS GB and GD&T Certified

### HIGHLIGHTS

- Provisional Patent filed on "Non-metallic coupler designing with electrical conductive path"
- 2 times Hackathon winner in Eaton by providing innovative ideas
- Lead R&D project ideas, like: next-gen air-taxi design, automated ground re-fueling procedure