

Detail-oriented Aerospace Engineering graduate with a strong foundation in manufacturing processes, technical design, and operational optimization. Proven ability to monitor complex systems, ensure Quality Assurance (PQA), and adhere to rigorous safety and PPE protocols in technical environments. Adept at following Standard Operating Procedures (SOPs), and collaborating in team settings to meet production targets and 5S standards to pursue opportunities in a learning and challenging environment where I can build expertise in management and data-driven decision-making. I aim to contribute to the success of the organization while developing the skills and experience needed for a long-term career in technology-driven business and operations.

EXPREIENCE:

Embry-Riddle Aeronautical University

Daytona Beach, FL

Volunteer - Aerospace Operations & Data Analytics Research Assistant

Mar 2026 - present

- Built and maintained a centralized aviation safety data repository containing ATC communications, incident reports, transcripts, and safety analyses.
- Automated transcript processing workflows that transformed raw ATC recordings into structured datasets for ASR and NLP applications.
- Standardized aviation safety data storage and indexing practices, improving dataset consistency and research accessibility.
- Curated and annotated safety-critical aviation events to support machine learning, human factors, and operational safety research.
- Produced detailed event summaries highlighting communication failures, resilience strategies, and safety implications across aviation incidents.
- Enabled development of AI-driven aviation safety analytics through structured data collection, transcript normalization, and event classification methodologies.

Graduate Student Assistant, Admissions and Enrollment Management

Jul 2023 – Dec 2025

- Aid staff with reviewing of transcripts and other admissions documents, creating transfer credit rules via Imaging.
- Assist students to complete their applications contacting applicants through Salesforce CRM and Outlook.
- Using Excel in data entry and sorting and storing the data.

Volunteer – Project Management & Supply Chain Operations

Jul 2023 – Dec 2025

- Assisted the Project Manager in coordinating supply chain activities, including packing and shipping requested orders on schedule.
- Supported inventory and storeroom organization to maintain efficient material flow and accurate stock levels.
- Conducted quality evaluation of damaged goods to determine usability and reduce operational waste.
- Collaborated on event logistics and planning, improving workflow coordination and stakeholder engagement.

Graduate Teaching Assistant (Operations Research)

Aug 2024 – Dec 2024

- Responsibilities included grading assignments, providing feedback to students, and assisting the course instructor with academic support tasks.
- Graded and provided structured feedback to 25+ students, improving course engagement and comprehension
- Assisted instructor with optimization coursework, ensuring consistent academic standards across student submissions.
- Guided learners in linear programming, simulation, and quantitative modelling practices.

Info CAD Centre

Hyderabad, India

Design Operations Intern

Aug 2022 – Mar 2023

- Trained in 2D and 3D designs in AutoCAD and SolidWorks.
- Drafted drawings of parts, Sheetmetal, Surface, Assembly.
- Facilitated communication verbally, with customers and management to resolve technical and administrative issues.
- Assisted in Request for Information/Proposal/Quote Preparation.

PROJECT EXPERIENCE:

Operational Efficiency & Routing Optimization Project

- Developed a structured model to improve operational resource allocation across multiple destinations.
- Evaluated system constraints and process trade-offs to enhance efficiency and reduce excess capacity.
- Applied data-driven analysis to support cost control and operational performance improvement.

Process Performance & Data Accuracy Improvement Project

- Evaluated operational performance across 5,000+ records to identify process inefficiencies.
- Improved accuracy of outcomes by 18% through structured validation and quality checks.
- Emphasized workflow consistency, process control, and continuous improvement.

Numerical Solutions of Quasi-One-Dimensional Flow Through Convergent-Divergent Nozzle

- In this project a generalized code was written to find the values along the centerline for every nozzle using MATLAB code with the McCormack technique.

- Analyzing the CFD results of the flow through the CD Nozzle(contour) via the centerline of the nozzle and compare the results with ANSYS results.

Route Feasibility Evaluation for New Airline Markets

- Analyzed demand, block time, and aircraft capability to determine feasibility of new routes.
- Used Python and Excel to evaluate load factors, breakeven points, and competitive environment.

Geography of Non-Integrated Cargo Airlines — FedEx vs UPS

- Conducted global cargo network analysis using SQL, Python, and Power BI.
- Evaluated hub structures, route density, and international connectivity differences.

Aircraft Turnaround Time Optimization

- Mapped complete aircraft ground-time workflow to identify bottlenecks.
- Used Python to model time-based sequencing changes for operational improvement.

Predicting Missed Passenger Connections (Machine Learning)

- Built ML model using Python (pandas, sklearn) to classify missed passenger connections.
- Cleaned and engineered variables from 5,000+ operational flight records.

Aviation Supply Chain Profitability Analysis

- Analyzed ROIC, cost structures, and financial challenges across airline supply chain sectors.
- Created Power BI dashboards illustrating operational and profitability trends

EDUCATION:

Embry-Riddle Aeronautical University (ERAU), Daytona Beach, FL

DEC 2025

Masters in Aerospace Business Analytics

Lakireddy Bali Reddy College of Engineering (LBRCE), Mylavaram, India

MAY 2022

Bachelors of Technology in Aerospace Engineering

SKILLS:

Analytical Problem-Solving | Modelling and Design Analysis | Time management | Attention to Detail | Customer Support

Manufacturing & Quality: In-Process Quality Checks (IPQC), Quality Inspection (PQA), 5S Workspace Management, Process Documentation.

Material & Inventory: Material Handling, Inventory Accuracy, Cycle Counts, Labelling & Traceability.

Operational Tools: Advanced Excel (Pivot Tables, VLOOKUP), Salesforce CRM, MS Office Suite.

Workplace & Safety: Team-Based Operations, Performance Metrics Tracking, Safety & PPE Compliance.

Computer: MS Office/Excel/PowerPoint/Word/Outlook; Python, AutoCAD, SolidWorks, ANSYS, MySQL, Lindo, R-Studio.

CERTIFICATIONS:

- Aon Early Careers Associate Account Executive (AAE) Spotlight Job Simulation on Forage - February 2024
- Body Language: Key to Professional Success (NPTEL).
- Two-day ethical hacking workshop (IIT Hyderabad)

LAUNGUAGES:

English (Fluent), Telugu (Native), Hindi (Fluent)