Jayalakshmi.K

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: jayalakshmi-k

CAREER OBJECTIVE

A prospective aerospace engineer at design and simulation in 2D, 3D modeling, using Autocad, Solidworks, Ansys-Workbench and Fluent, data and parametric analysis using Python, C and C++; And with good interpersonal skills, coupled with an ability to solve the complex problem in team and handle independent responsibility, seeking a role to contribute and grow with the organization in long term, while enriching domain related experience.

EDUCATION

- BTech in Aerospace Engineering 2020-2024 CGPA: 9.27/10

Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Coimbatore
Subject: Aerostructures – Grade O; Aerodynamics 1 – Grade O

- AISSCE (11 – 12th std) 2018-2020 Marks:463/500

Stream/Subjects: Mathematics, Physics, Chemistry, Computer Science
Aristo Public School (CBSE), Cuddalore

- AISSE (10th std) 2018 Marks:455/500

Aristo Public School (CBSE), Cuddalore

INTERNSHIPS

- Design Intern, Pegasus Aerospace System July – August 2022
  Designed, rendered and developed a 2D, 3D-model of an aircraft Airbus A380 and simulated the flow over the wing using Solidworks.

EXPERIENCE

- Graduate Engineer Trainee at Precision Engineering and System, Larsen and Toubro
  Learning: My work involved the detailed design and structural analysis (Static and Dynamic) of transportation fixture.
  Software used: Ansys Fluent (Static, Random and Modal Analysis). July 2024- June 2025

TECHNICAL SKILLS

- Languages: C, C++, Python (Intermediate), Matlab (Intermediate), SQL
- Tools/Package/Libraries: Solidworks, Ansys-workbench, fluent, Autocad, Canva
- Office ware: MS PowerPoint, MS excel, MS word

CERTIFICATIONS

- Technical maintenance of aircraft and aircraft engines February 2023
  Samara University *with Stepik*
  Credentials: https://stepik.org/cert/1962628
- Python Data Structures November 2022
  University of Michigan *with Coursera*
  Credentials: https://coursera.org/share/b7207fd1f2559420f7c437651352591f
- Matlab Onramp June 2022
  Mathworks

Credentials:https://matlabacademy.mathworks.com/progress/share/certificate.html?id=1c61c84d-0515-457b-a120-a74469df1f35&

- Digitalisation in Aeronautics December 2021
  Munich Aerospace *with Coursera*

Credentials:https://www.coursera.org/learn/aeronautics/home/week/4?utm_source=link&utm_medium=certificate&utm_content=cert_image&utm_campaign=sharing_cta

TECHNICAL INTEREST

- Aircraft design
- Aerodynamics
- Aerostructures

PROJECTS

- CFD Analysis of Tandem Wing Configuration in a Low Reynolds number Transonic Regime (Final Year Project – Aerodynamics) March 2024

Tools: Ansys Workbench and Fluent software.

Objective: Design and Analyse the aerodynamic performance of Tandem Wing configuration in Low Reynolds number Transonic regime as the chord ratio is varied.

Outcome: Designed a 2D tandem wing configuration using Ansys workbench and meshing and simulation has done using Ansys Fluent. We have analysed, the impact of variation in chord ratio on Aerodynamic Efficiency under the specified operating condition.

Role: Design and Analysis study. Grade: O

- Navigational Aid for visually impaired people (Innovation lab) April 2023

Objective: To implement the knowledge on control system and help to solve the social problems. Grade: A^+

Tools: Arduino software

Outcome: Generated a working circuit-model; which uses sensor, IMU, buzzers, help navigate the blind people with help of sound response from buzzers, when they detect the obstacles, using Arduino code.

Role: Coding in Arduino and circuit arrangement in a head band

- Reflex Airfoil/Design and wing generation (Aerodynamics) January 2023

Objective: To design airfoil using the bi-quadratic equation and generate a wing equation.

Tools: Python

Outcome: Studied the behavioural properties of wing generated using SKRS airfoil series. Generated the plot of drag polar curve and lift distribution curve from the data extracted from the generated wing and which approximately fits with the original curve.

Role: Generated the SKRS airfoil series equation and python code Grade: A

ACHIVEMENTS

- Graduated B.Tech with Department level Gold Medal

HONOURS

- Leadership – (Placement coordinator of our class), , Amrita Vishwa Vidyapeetham
- Member of Astra Club (Astronomy), Amrita Vishwa Vidyapeetham

EXTRA CURRICULAR ACTIVITIES

- Event Management (Master of Ceremony)
  - Society and animal welfare contribution Award ceremony for women April 2023
  - Enivornmental Welfare event (Government of India) March 2023
- Volunteer
  - Head of correspondence team for an International conference February 2024

LANGUAGE PROFICIENCY

Tamil (Native), English (Professional), Hindi (Conversational), Malayalam(Elementary)

PERSONAL DETAILS

Date of Birth: 10/07/2003

Hobbies: Pencil Sketching, dancing and poster making

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K. Jayalakshmi