

M P Thashwan Sarathi

#418,7th cross, Gandhi Nagar,
Mandya – 571401
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Objective

Motivated and detail-oriented Aeronautical Engineer with an M. Tech specialization, seeking opportunities in Product Design, Research & Development (R&D), CAD/CAE, CFD Analysis, Design Engineering, and Academia. Eager to apply strong technical knowledge, analytical skills, and hands-on experience to contribute to innovative engineering solutions while fostering learning, research, and technological advancement.

Education

Master of Technology (M. Tech) - Aeronautical Engineering [Aerospace Propulsion Technology]

Visvesvaraya Technological University Center for Post Graduate Studies (CPGS), Muddenahalli, Chikballapura – 562103

Visvesvaraya Technological University, Belagavi- 590018

2026 | CGPA: 9.5

Bachelor of Engineering (BE) - Aeronautical Engineering

Gopalan College of Engineering & Management, Bengaluru- 560048

Visvesvaraya Technological University, Belagavi- 590018

2024 | CGPA: 7.2

Pre-University (PU)

Santhome PU College, Karnataka State Board, Mandya - 571401

2020 | Percentage: 68%

Secondary Education (10th Grade)

Cauvery Public School, ICSE Board, Mandya- 571401

2018 | Percentage: 85%

Work Experience

Internships

Design Trainee/ Intern

Prime Toolings, Rajajinagar, Bengaluru- 560010

|September 2025 – December 2025

Worked as a Design Trainee in the Aerospace & Defence domain, responsible for developing 3D CAD models and performing structural and engineering analyses of defence systems, including Solid Rocket Boosters, Artillery Components, and Ramjet Engines. Gained hands-on experience in CAD modelling, design optimization, engineering documentation, and simulation-driven design workflows while collaborating with senior engineers to support product development, validation, and manufacturing activities

Design Trainee/ Intern

Lakshya Pinnacles, sole Devanahalli, Bengaluru- 560107

|June 2023 - June 2024
[Hybrid mode]

Assisted in the design and development of innovative product concepts, utilizing CAD software to create detailed design drawings and prototypes. Worked closely with engineering teams to optimize product designs for functionality and cost-effectiveness, resulting in the successful launch of several new products.

Trainee Intern

Hindustan Aeronautics Limited, RWR&DC, Bengaluru- 560068

|Aug 2023- Sept 2023

Gained a tremendous experience in the observation of the development of LCH, LUH and ALH helicopters learnt about the communication system used in helicopters used by Indian Airforce and also acquired a glimpse about the navigation and weaponry systems used in light combat helicopters and also advanced light helicopters.

Fabrication technician

Ramya Composites, Mandya- 571401

| April 2020- Aug 2020

Performed the role of inspecting the molds before initiating the fabrication. Ensure that the resin and harder is blended in the right proportion and ultimately fabricate the composite material according to consumer's requirement and also ensure its quality.

Grants Awarded

1. The project "Design and Development of Robust and Adaptive Icosahedron Frame Capable of Absorbing and Dissipating Collision Forces, Minimizing the Risk of Critical Damage To UAS" has been awarded the sum of rupees 9,500 under **47th series of student project program (SSP):2023-2024** from **KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY [KSCST].**

Projects

Design and Aerodynamic Analysis of a Micro Turbojet Engine Capable of Producing 50Kg [490N] Thrust for UAV Application

| Jan 2026 – June 2026

Designed and developed a 50 kg (490 N) thrust micro turbojet engine for UAV applications by integrating aerodynamic, thermodynamic, and propulsion design principles. Created detailed 3D CAD models of engine components, including the centrifugal compressor, combustion chamber, turbine, and nozzle, and carried out CFD and structural analyses using ANSYS to evaluate airflow, pressure distribution, temperature, velocity, and structural integrity. Optimized the engine design for enhanced performance, efficiency, and manufacturability while gaining hands-on experience in aerospace propulsion system design, simulation, and engineering validation.

Design and Development of Robust and Adaptive Icosahedron Frame Capable of Absorbing and Dissipating Collision Forces, Minimizing the Risk of Critical Damage To UAS.

| Sept 2023 – March 2024

Designing an icosahedron frame capable of absorbing and dissipating collision forces such that it provides an uninterrupted flight path to the UAV firstly initial calculation is done for constructing icosahedron structure and later icosahedron frame is fabricated in solid works later it is drop tested in Ansys. after structure passed the drop test the structure is fabricated with suitable material and real time physical crash analysis is performed.

Design and Development of Loitering Drone a Replica of MQ-9 Reaper an US Military.

| June 2023 - June 2024

In the development of the Loitering Drone, a replica of the renowned MQ-9 Reaper utilized by the US Military, I played a pivotal role in designing the CAD model and conducting Computational Fluid Dynamics (CFD) analysis to ensure optimal performance and aerodynamic efficiency. I meticulously crafted the CAD model of the

drone, paying close attention to detail and accuracy to replicate the aerodynamic profile and structural features of the MQ-9 Reaper. Leveraging my expertise in CAD software, particularly SolidWorks, Additionally, I spearheaded the CFD analysis phase, employing advanced simulation tools such as ANSYS Fluent to evaluate the aerodynamic performance of the drone under various operating conditions. By simulating airflow over the CAD model

Design and Development of 3D Printer with a Bed Size of 500mm*500mm

| Sept 2023 – March 2024

In the ambitious project of designing and developing a 3D printer with a spacious bed size of 500mm*500mm, I assumed a critical role in the assembly phase, leveraging my technical expertise and attention to detail, I meticulously followed assembly instructions and diagrams, ensuring precise alignment and secure fastening of components. Throughout the assembly process, I conducted thorough quality checks and inspections to verify the integrity and functionality of each component, addressing any discrepancies or issues promptly to maintain high standards of quality and reliability.

Numerical study of aerodynamic characteristics over NASA SC (2) 0414 super critical airfoil with and without wedge profiles at various angle of attack and free stream velocity | Apr 2023 - Jul 2023

conducted numerical analysis over NASA SC (2) 0414 super critical airfoil using advanced software like Xflr5 and validated with available experimental results the morphed the airfoil with four different cases of wedge profiles and CAD model was done in solid works and later CFD analysis was performed to the morphed airfoils in Ansys fluent which resulted in 10% increment in the efficiency of the case four morphed airfoil.

Technical Skills

SolidWorks	Ansys fluent
Catia V5	Xflr 5
X-foil, Java foil	Solid Edge V19

Soft Skills

Leadership Quality	Decision Making
Multitasking	Communication
Problem Solving	Continuous Learning

Interests

Aircraft Propulsion	Design and fabrication of UAV
Composite fabrication	Aircraft simulation & Modelling

Roles Undertaken

Organizer GOAERO- 2K23 | Apr 2023

A National level Intercollegiate Aero techno, cultural fest

Chief organizer of Kannada parva | Nov 2023

Chief organizer of composite fabrication workshop | Dec 2023

Achievements

National level hip-hop champion gold medalist in national level hip-hop championship organized by ISAFA. November 2020.

Best winger from dyes football club. April 2020.

State level football champion organized by Sha-Hin college, Bidar. October 2019

Master class winner gold medalist in master class pro dirt racing organized my friend's racing association at Naga Mangla, June 2019.

TVS class winner gold medalist in TVS class pro dirt racing organized by friends racing association at Naga Mangla, June 2018.

Personal Details

Nationality: Indian

Gender: Male

Date of Birth: 30th December,2002.

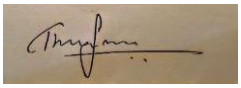
Marital Status: Unmarried

Permanent Address: S/O Partha Sarathi M N, # 418, opposite to Mega Medicals ,7th cross, Gandhi Nagar, Mandya - 571401

Language known: English, Kannada, Hindi, Telugu and Tamil.

Declaration

I hereby declare that above information is correct to the best of my knowledge and belief.



Place: Mandya

Date: 11/11/2026

M P Thashwan Sarathi