

AYUSH SINGH

MECHANICAL ENGINEERING STUDENT

+91-9426140218 | 23bme099@sot.pdpu.ac.in | Ahmedabad, GJ, India | [www.Linkedin.com/in/ayyyuusshhh](https://www.linkedin.com/in/ayyyuusshhh) | www.theayush.in

EDUCATION

Bachelor of Technology, Mechanical Engineering | Pandit Deendayal Energy University 2023 – 2027

- Merit Scholarship Recipient (100% Tuition Fee) | 2023 – Present

WORK EXPERIENCE

Core Technical Member | Apogee3 – Aerospace Society of PDEU 2023 – Present

- Increased Rocket Motor KNSB Fuel Packing Efficiency by 50% by developing casting-based workflow
- Improved Efficiency of Motor by 25% by designing De Laval CD Nozzle
- Ascent Mission Design, Active Fin Control, Propulsion, Design & Analysis, Flight Computer
- Raised Sponsorship of \$3,600

Space Science Content Developer Intern | Tanmaye's Amazing Space 2023

- Created a research database on the Sun and pointed out the research gaps

President & Founder | SciKnowTech VIPNET Science Club 2021 – 2023

- Registered under the government of India
- Organized 20+ events on science and technology

Trainer (Intern) | Royal Technosoft Pvt. Ltd. 2020

- Trained 800+ International students for C programming and game development with Unity

TECHNICAL & RESEARCH PROJECTS

- **“Property and Composition Dependence of hot cracking in LPBF for different materials”** | IMECE-INDIA-25, Hyderabad | 2025 | Ayush Singh, Chaitya Doshi, Vishvesh Badheka
- **“Predictive Analysis of Multi-Effect-Distillation System using ANN”** | ICAWTM-25, Gandhinagar | Rahul Deharkar, Param Soni, Ayush Singh
- **“Additive Manufacturing of Batteries Recent Trends and Challenges”** | 1st International Symposium on Battery Technology, Gandhinagar | Ayush Singh, Ojas Satbhai

SKILLS & INTERESTS

CFD | CAD | Welding | Additive Manufacturing | Programming | Model Rocketry | Aerospace Engineering | Astronomy | Event Management | Leadership | Public Speaking | Fine Arts | Lawn Tennis

PROFESSIONAL DEVELOPMENT

Essentials of Model Rocketry | IN-SPACE, ISRO| Bangalore 2024

SKILL DEVELOPMENT PROGRAMS

Vibration Analysis Bootcamp (10 hrs.) ASME, PDEU Gandhinagar	2025
CNC Turning (40 hrs.) PDEU Gandhinagar	2024
LaTeX for Scientific Writing (16 hrs.) PDEU Gandhinagar	2024
Computational Fluid Dynamics (40 hrs.) PDEU Gandhinagar	2024
Basics of Modelling in NX (40 hrs.) PDEU Gandhinagar	2024
Basics of Computational Fluid Dynamics (40 hrs.) PDEU Gandhinagar	2024
Advanced Welding Processes (40 hrs.) PDEU Gandhinagar	2024
Metal Additive Manufacturing, Intech iFusion SF1 (24 hrs.) IIW, PDEU Gandhinagar	2023
Data Science Odyssey (40 hrs.) PDEU Gandhinagar	2023
C, C++, HTML-CSS, Python, Arduino, Java Royal Technosoft Ahmedabad	2019 – 2021
Advanced Art Course Kanoria Center for Arts Ahmedabad	2014 – 2017

HONORS & AWARDS

3rd rank, Mech-A-Thon – Mechanical Hackathon PDEU Gandhinagar	2025
Consolation Cash Prize, MSP Cup Hackathon IEEE, PDEU Gandhinagar	2024
1st rank in Mechanical Engineering, 1st Year PDEU Gandhinagar	2024
Panelist in “Science Festival – Make, Innovate, Lead” Respire, GUJCOST Ahmedabad	2021
3rd Winner in National COVID-19 Idea Challenge on 'AI & Robotics' VASCSC Ahmedabad	2020
Finalist, Children Innovation Festival - 2k19 GUSEC Ahmedabad	2019

VOLUNTEERING

Coordinator, Numerical Analysis and Coding in CFD PDEU	2025
<ul style="list-style-type: none">Trained 55+ people (BTech, MTech, PhD) for basics of CFD coding (FVM) in python	
5-day workshop on CFD PDEU	2025
Lawn Tennis Core Member Sports Committee, PDEU Gandhinagar	2024 – 2025
Ambassador for Additive Manufacturing PDEU Gandhinagar	2023 – 2025
Coordinator, Basics of CFD PDEU	2025
Event Coordinator, 1st International Symposium on Battery Technology ICTEA, McMaster University, Toronto Metropolitan University, PDEU Gandhinagar	2024
Science Carnival SciKnowTech Ahmedabad	2024
Technical Member Encode – Programming Club, PDEU Gandhinagar	2023 – 2024
Logistics Member Daastan – Drama Club, PDEU Gandhinagar	2023 – 2024

ACTIVITIES AND SOCIETIES

American Society of Mechanical Engineers	2024 – Present
Indian Institute of Welding	2023 – Present

CERTIFICATION

Java SE 8 Fundamentals Oracle Ahmedabad	2020
Intermediate Art Certification Art Directorate of the Government Ahmedabad	2017
Elementary Art Certification Art Directorate of the Government Ahmedabad	2016