

**Amandeep Singh** (Academic Philosopher, AE Engineer & Researcher)

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# **EDUCATION**

LOVELY PROFESSIONAL UNIVERSITY Graduation in Aerospace Engineering

Completed in 2022 Punjab, India

**DEFENCE INSTITUTE OF TECHNOLOGY** M.Tech in Aerospace Engineering

**Pursuing from May 2024** Pune, India

## SKILLS

#### **Technical Skills**

- Simulation & Design Tools:
- ANSYS (FEA & CFD)
- PTC Creo

### **Programming & Development:**

- Python
- Web Development
- App Development
- HTML, CSS & JavaScript (Beginner Level)
- SQL
- Data Science

### Al Integration:

 Al Tools & ChatGPT **Applications** 

# **Productivity & Design:**

- MS Office Suite (Word, Excel, PowerPoint)
- Canva

### INTERNSHIP

- ANSYS (SPACECLAIM) Software **Training**
- ANSYS (CAE+CFD) Analysis Training
- GEOMETRIC DIMENSIONING & **TOLERANCING**
- Spacecraft design

#### PATENT

A NOVEL DESIGN FOR SLANT BACK TAIL GENERATION AIRCRAFT

APPLICATION NUMBER: 202211013218A
PUBLISHED IN 2022

# **PROFILE**

I have always focus upon building up my personality every day, exploring something new and learning new way to develop my skills.

# WORK EXPERIENCE

# Orbitx India Aerospace, Jaipur, Rajasthan, India

Space Tutor Volunteer (Part Time)

MAR 2024- NOV 2024

91-9211910555

India

- · Volunteered as a space tutor at Orbitx India, focusing on aerospace education.
- Guided curious minds through aerospace concepts, fostering understanding and inspiration.
- Contributed to India's space journey through meaningful teaching

# School of Aeronautics, Neemrana, Rajasthan, India

Instructor

Feb 2024- June 2024

- Serve as an instructor in a school of aeronautics, combining theory with practical learning.
- Guide students through complex topics like flight dynamics, navigation, and aircraft systems.
- Foster curiosity and passion for aerospace among aspiring aviators and engineers.

# Indian Institute of aeronautical engineering college, Dehradun, UttaraKhand

College Lecturer

Aug 2023 - Oct2023

- · Worked as a college lecturer at an Indian institute of aeronautical engineering.
- Taught core subjects such as aerodynamics, propulsion, and avionics.
- Guided aspiring engineers in their academic and professional journeys.

#### Aharada Education, IIMT UNIVERSITY, U.P., India

Teaching Faculty

Sept 2022 - Dec 2022

- Served as a teaching faculty at Aharada Education, supporting educators in their roles.
- Facilitated interactive sessions to enhance student engagement and learning.
- · Assisted students in understanding and mastering challenging concepts.

#### ORBITX INDIA AEROSPACE, Rajasthan, India

Researcher

May 2022- Aug2022

- Conducted research on rocket nozzle design at OrbitX India.
- · Focused on optimizing nozzle geometry for maximum thrust and efficiency.
- Balanced thermal and material stress considerations in design processes.

# ORBITX INDIA AEROSPACE, Rajasthan, India

Mentor

Jan 2021- Sept 2022

- Served as a space mentor at OrbitX India Aerospace, guiding students in exploring space sciences.
- Mentored aspiring minds in advanced aerospace concepts and applications.
- Designed and supervised hands-on projects to enhance practical understanding.

# **APPRECIATION** CERTIFICATE

 BY ORBITX INDIA AEROSPACE **FOR RLV PROJECT** 

# MECHANICAL **PROJECT'S**

- GO KART JAN 2020
- RLV PROJECT

# **PROGRAMMING** PROJECT's

- Aerospace Web Page (Self) -April 2025
- Aerodynamic Parameter Calculator (Self) - Feb 2025
- Solid Rocket Motor Design & Analysis (Self) - Feb 2025
- Low Subsonic Wind Tunnel Design (Self) - Mar 2025
- Aerofoil Generator App (Self) - Mar 2025
- Fuel-Powered UAV Design Calculator -(Self) - Mar 2025
- Jet Engine Performance Estimator -(Self) - Mar 2025
- Battery-Powered UAV Performance Evaluation -May 2024

# Webinar **Participation**

- Data science vs Machine **Learning vs Artifical** Intelligence. Scaler, Mar 2025
- Data science using Gen Al and Python. Scaler, April 2025

# WORKSHOP

- · Workshop on Welding.
- · Workshop on basic Manufacturing.
- Workshop on lathe machine.

# **Educational Activity**

- Idea Generation Workshop on Prototype / Process Design & **Development of Drones** Speaker May 2023
- Education Tour Airforce museum **May 2023**

## PROGRAMMING CERTIFICATION

Python Course For Beginners	Scaler	25/Feb/ 2025
Python and SQL For Data Science	Scaler	08/Mar/ 2025
Data Science	Scaler	17/Mar/2025
<ul> <li>Python App Development Master Class</li> <li>App Development Bootcamp</li> </ul>	Udemy	28/Mar/2025
HTML CSS And Javascript Certification     Course For Beginners	Udemy	25/April/2025

#### CONFERENCE

Global Conference on Aeronautical, Aerospace and Mechanical May-2024 **Sciences** 

PYTHON BASED EVALUATION OF AIRCARFT PEROFRMANCE PARAMETERS FOR **BATTERY POWEED UAV DESIGN** 

International Conference On Emerging Approaches In Mechanical & Automobile Engineering

A COMPARITIVE STUDY ON EFFECT OF AREA RATIO AND NOZZLE PRESSURE RATIO (NPR) FOR CD NOZZLE - REVIEW

# RESEARCH PUBLICATION

**REVIEW PAPER ON CFD ANALYSIS OF DIFFERENT NACA AIRFOIL SERIES** 

<u>Journal of Emerging Technologies and Innovative Research</u>

PYTHON PROGRAMMING IN THE AEROSPACE INDUSTRY International Journal of All Research Education & Scientific Methods Feb-2024

CASE STUDIES IN MISSILE DESIGN FAILURES BY CFD SIMULATION Sept-2023

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS

Oct-2020

March-2024

WIND TUNNEL DESIGN

Nov-2022 International Journal of Research and Analytical Reviews

**EFFECT OF PRESSURE COEFFICIENT ON MISSILE DESIGN** 

International Research Journal of Engineering and Technology Dec-2020

FLOW VARIATION OVER BI-CONIC NOSE PROFILE AT DIFFERENT

INTERNATIONAL JOURNAL OF SCIENTIFIC DEVELOPMENT AND RESEARCH

**AERODYNAMIC ANALYSIS ON MISSILE DESIGN** 

INTERNATIONAL JOURNAL OF SCIENTIFIC DEVELOPMENT AND RESEARCH Sept-2020



