MUDU SUMAN | AE15B052 | 22/AE/20/052

INDIAN INSTITUTE OF TECHNOLOGY MADRAS



EDUCATIONAL QUALIFICATIONS

Program	Institution	Year of completion	CGPA/%
Dual Degree: Aerospace Engineering	Indian Institute of Technology Madras	2020	6.15/10
XII, BIE, Telangana	Narayana Junior College, Hyderabad	2015	90%
X, SSC Board, AP	Sri Gurukula Vidhyalayam, Narsampet	2013	8.7/10

PROFESSIONAL EXPERIENCE

National Aerospace Laboratories (NAL, Bangalore)

May'19 – June'19

- Worked on Shock/ Turbulent Boundary Layer Interactions in Experimental Aerodynamic Division (CSIR)
- Analyzed the effects of airflow over cavities in high speed fighter aircrafts used to carry missiles and weapons.
- Proposed modifications to the design to minimize drag, vibrations and noise caused due to their unsteady flow dynamics

COURSE PROJECTS

Design of UAV and MAV

- AS5213, Course project, Prof Ranjith Mohan
- Developed a SolidWorks model of Twin Fuselage Aircraft
- Used XFLR5 and AVL design programs for aerodynamic and stability analysis of the Aircraft
- Designed a 2kg Aircraft which can carry a payload of 300 grams which cruise speed 10m/s.

Mini Project- Structural Design

• Built a Blended Wing Body (BWB) Unmanned Aerial Vehicle(UAV) with an endurance of 25 min to carry payload of 0.5kg with a range of 5km so as to carry out rescue operations, crowd management, surveillance operations, mapping damaged areas and many others.

Characterization of Flow separation over Airfoil (on going)

• Observing airflow over airfoil under varying pressure conditions and checking the flow separation points practically relating to the available analytically calculated points.

COURSE WORK

- Probability, Statistics & Stochastic Processes
- Bio Statistics
- Series and Matrices
- Differential Equations

- Introduction to programming
- Functions of several variables
- Complex Numbers
- Strategies for professional growth

TECHNICAL SKILLS

• C Language, Python, R

• Microsoft Office

Statistical Analysis

Photoshop

• LaTeX

AutoCAD

POSITIONS OF RESPONSIBILITIES

Security Super Coordinator | Saarang

2018-2019

- Lead a team of 10 coordinators to ensure safety and security during Saarang for a footfall of over 70,000
- Installation and monitoring of surveillance cameras at various locations during Saarang
- Successfully managed security storage locker facility for visitors of all 5 events at OAT during Saarang
- Ensured safety during all OAT events by thorough security checks of every visitor as per safety guidelines
- Budgeting and negotiating end to end deal with vendors for walkie-talkies, wrist-bands, breath analyzers etc.

Hospitality Coordinator | Inter IIT Sports Meet

2017

- Successfully handled accommodation, transportation and facilities for over 500 participants from 3 IITs
- Ensured a great stay here at IIT Madras by serving as a primary contact point for students in 2 hostels

Inter IIT Sports Team Member One of the two persons selected for Inter IIT team in 5km Athletics Run Category for Inter IIT Sports Meet Dean's Trophy Achieved 2nd place in Dean's Trophy Run for 8km among all institute student participants Achieved 7th place in Dean's Trophy Cycling for 8km among all institute student participants Samanvay Event Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras NSO 2015 Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI 2015 Built a destructive bot in workshop conducted by iBot club - CFI 2015 *Saarang – Annual Cultural Fest of IIT Madra	CO-CURRICULAR & EXTRA CURRICULAR ACTIVITIES	
Dean's Trophy Achieved 2 nd place in Dean's Trophy Run for 8km among all institute student participants Achieved 7 th place in Dean's Trophy Cycling for 8km among all institute student participants Samanvay Event Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras NSO Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	Inter IIT Sports Team Member	201
Achieved 2 nd place in Dean's Trophy Run for 8km among all institute student participants Achieved 7 th place in Dean's Trophy Cycling for 8km among all institute student participants Samanvay Event Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras NSO Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	One of the two persons selected for Inter IIT team in 5km Athletics Run Category for Inter	er IIT Sports Meet
Achieved 7 th place in Dean's Trophy Cycling for 8km among all institute student participants 2018 Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras NSO Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	Dean's Trophy	2016
Achieved 7 th place in Dean's Trophy Cycling for 8km among all institute student participants 2018 Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras NSO Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	Achieved 2 nd place in Dean's Trophy Run for 8km among all institute student participant	es
Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras NSO Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015		
NSO Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	Samanvay Event	2018
Selected in Athletics team of NSO alongside 30 members Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	Achieved 4th position among 1000 runners in an event organized by DoMS, IIT Madras	
Built a glider in workshop conducted by Aero club – CFI Built a destructive bot in workshop conducted by iBot club - CFI 2015	NSO	2015
Built a destructive bot in workshop conducted by iBot club - CFI 2015	Selected in Athletics team of NSO alongside 30 members	
Built a destructive bot in workshop conducted by iBot club - CFI 2015	Built a glider in workshop conducted by Aero club – CFI	2015
*Saarang – Annual Cultural Fest of IIT Madra		2015
	*Saarang – Annual Cultural	Fest of IIT Madra
	*Saarang – Annual Cultural	Fest of IIT Madra
	*Saarang – Annual Cultural	Fest of IIT Madra
	*Saarang – Annual Cultural	Fest of IIT Madra