Mohanraj A

Roll No.: AM23S055
M.S. by Research
Applied mechanics and Biomedical Engineering
Indian Institute of Technology, Madras

+91-8838742873
am23s055@smail.iitm.ac.in
mohanrajarasu0168@gmail.com
Linkedin Profile

Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
M.S.	Indian Institute of Technology, Madras	8.0 (Current)	2023-Present
B.E.	VIT, Vellore	9.13	2022
Higher Secondary	Tamil Nadu State Board	91.0%	2018

Research work and Academic Project

- **Geometry, Mechanics and Control of Scissor linkages** *September 2023 - **
  IIT Madras
  - Understanding the mechanics of Scissor linkage mechanism
  - Transforming the mechanism to a desired curve
- **Universal Tensile Testing(UTM) Machine** *January 2022 - May 2022*
  VIT ,Vellore
  - Portable UTM: Compact, lightweight design for versatile testing environments.
  - Cost-effective Solution: Smaller footprint, swappable components reduce operational expenses
  - Enhanced Calibration: Arduino-based method ensures accurate strain measurement reliability.

Job Experience

- **Accenture** *August 2022 - August 2023*
  Chennai
  - As Java junior developer, collaborated to develop and maintain applications, focusing on coding, debugging, and implementing new features to support project objectives

Certifications

- **Satellite Altitude Dynamics and Control** *March 2022*
  Online Course
  - NPTEL Certification (Topped the exam)
- **Mechanics and Control of Robotic Manipulators** *March 2022*
  Online Course
  - NPTEL Certification

Skills

- **Programming**: `python`, `Java`, MATLAB
- **Simulation Tool**: ANSYS
- **Modelling**: Solidworks, Fusion 360
- **Writing tools**: LaTeX

Key courses taken

- **Computational methods in mechanics**: AM5600
- **Non-linear dynamics**: AM5650
- **Stochastic processes in mechanics**: AM5340
- **Bioinspired engineering**: AM5535

Positions, Achievements, Awards

- **Technical Team Member**, Team Sammard, VIT Vellore *June 2019 - May 2021*
  - Participated in ABU Robocon 2020 Nationals and secured 7th Rank
  - Team Sammard's science payload bagged 13th position (out of more than 100 teams) internationally in cansat 2021 competition.
- Designed rocket's aerodynamics for SA Cup competition that reached altitude of 3 km
- Won *"Special Achiever award"* for the year 2021-22 based on exemplary performance at various International events representing VIT Vellore