Brief Bio

Vasanth B S

Final Year Student

B.Tech. in Mechanical Engineering

National Institute of Technology (NIT), Calicut



Education



National Institute of Technology, (NIT) Calicut

BTech in Mechanical Engineering

CGPA: 9.21 / 10.0

2020 - 2024

Project Title: Design, Fabrication, and Control of a Multipurpose Marine Robot

Project Advisor: Dr. Sudheer A P, Associate Professor, National Institute of Technology

(NIT) Calicut

Funding: Secured a Grant of Rs. 75,000 from the *Centre for Innovation, Entrepreneurship* and *Incubation (CIEI)* at NIT Calicut

BTech Project: Marine Robot

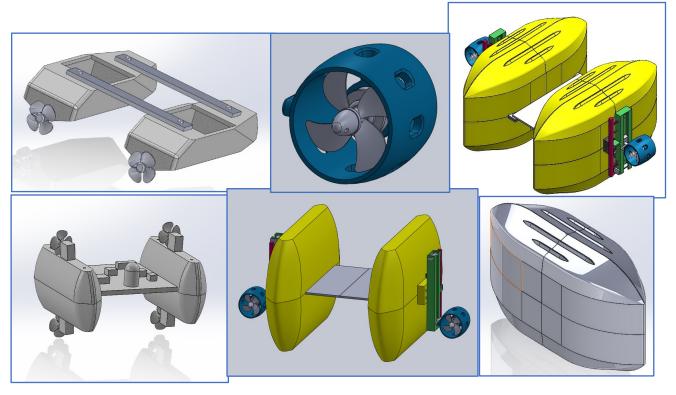


Fig. Conceptual Design of the Robot

Finalized the design for the marine robot, and started procuring the required components for fabrication.

Semester Wise Performance at NIT Calicut

Semester	SGPA	CGPA
I	8.80	8.80
II	9.71	9.18
III	9.50	9.30
IV	9.58	9.37
V	8.45	9.16
VI	9.30	9.19
VII	9.36	9.21

Education



Class XI and Class XII

Telangana State Board of Intermediate Education, (TSBIE)

2017 - 2019

Sri Chaitanya College of Education

Percentage: 95.5 %



Class X

Central Board of Secondary Education, (CBSE)

2016 - 2017

Atomic Energy Central School (AECS), Hyderabad

GPA: 10.0 / 10.0

Ranked in the Top 20 among 1256 first-year undergraduates at NIT Calicut, Was Eligible for Branch Change

Ranked among top 20 first-year undergraduate students across all departments at NITC and was granted the option of branch change due to my outstanding academic performance in my first year of undergraduate studies.

Aug 2021

Department Rank 1 in 4th Semester at NIT Calicut

Secured highest SGPA of 9.58 / 10.0 among 210 students in the Mechanical Engineering Department at NIT Calicut.

June 2022

Summer Internship - June 2022



Indian Institute of Technology (IIT), Hyderabad

Summer Research Fellow

June 2022 – July 2022

Title: Designing Novel Metamaterials

Guide: Dr. Prakhar Gupta (Assistant Professor at the Department of Mechanical and Aerospace

Engineering, IIT Hyderabad)

Work Carried Out

- Explored metamaterials through the study of review papers, including the captivating "Flexible Mechanical Metamaterials" by the Bertoldi group at Harvard University. This paper delved into modeling diverse mechanical and auxetic metamaterials.
- Found particular interest in the applications of metamaterials in healthcare, such as artificial organs and prosthetic limbs.

Indian Academy of Sciences Fellow



IASc – NASI – INSA Summer Research Fellowship

IAS Summer Research Fellow

May 2023

Recipient of the prestigious IASc-INSA-NASI Summer Research Fellowship

- Selected for the highly competitive Indian Academy of Sciences Fellowship, one of the most prestigious fellowships in India
- Chosen as one of the top 100 students from leading institutions across India in all engineering fields, from a pool of thousands of applicants.

Summer Internship - May 2023



Indian Institute of Science (IISc), Bengaluru

IAS Summer Research Fellow

May 2023 – June 2023

Title: Droplet dynamics on heated substrates

Guide: Dr. Susmita Dash (Assistant Professor at the Department of Mechanical Engineering,

IISc Bengaluru)

Work Carried Out

- Conducted the experiments involving water droplets on hot pillared surface, and capturing the dynamics using high-speed cameras
- Conducted Image processing with OpenCV on the clip of a Leidenfrost droplet
- Gained proficiency in the underlying principles of various image processing algorithms, including
 Gaussian Blur, Canny Edge Detector, Thresholding, and Contouring
- Quantified the effect of increase in heat transfer from the pillars to the droplet with pillar height, by modelling the system as fins

Summer Fellowship Program at IIT Madras



Indian Institute of Technology (IIT), Madras

Summer Fellowship Program, (SFP)

May 2023

Selected for the IIT Madras Summer Fellowship Program (SFP)

- Selected for the highly sought out IIT Madras Summer Fellowship
- Chosen as one of the top students from leading institutions across India in all engineering fields, from a large pool of applicants.

SURGE Program at IIT Kanpur



Indian Institute of Technology (IIT), Kanpur

SURGE Program

May 2023

Selected for the IIT Kanpur SURGE Program

• Selected for the IIT Kanpur's Students Undergraduate Research Graduate Excellence (SURGE) program to work with Prof. Sameer Khandekar

Top 3 in the Mechanical Engineering Department after the end of 6th Semester

Standing among the Top 3 in the entire undergraduate class of Mechanical Engineering, consisting of 200+ students, after the conclusion of the 6th semester

Nov 2023

Secured highest grade in the courses on Machine Learning, Computer Programming, Robotics and Mathematics courses during Bachelor's at NITC

Secured highest grade in the courses: "ME4131D: Machine Learning for Data Science and Analytics", "ZZ1004D: Computer Programming", "ME4023D: Introduction To Robotics" and all the Mathematics courses during Bachelor's at NIT Calicut

Nov 2023

Attained a Grade of 9.0 or above in 83% of courses taken at NITC so far

Secured more than 9 points (i.e., S and A grades) in 44 courses of the total 53 courses credited at NIT Calicut

Jan 2024

Volunteering Activities

Mentoring and Inspiring Junior Peers

Oct 2023

- Provided guidance to second and third-year undergraduate students in crafting effective Statements of Purpose for their applications to research internships
- Actively encouraged and motivated junior peers to pursue research opportunities, addressing their inquiries promptly through email, WhatsApp, and phone calls, even during unconventional hours

Interim Class Representative

Dec 2022

• Served as the primary point of contact for all students within the class, facilitating seamless communication and acting as a bridge between students and faculty.

Active Participation in Club Events

Dance Performance at the Danza event organized by Dance and Dramatics Club



https://www.youtube.com/watch?v=1idr834ZcP4

Making NIT Calicut Proud















