Anubhab Majumder

Email: anubhabm@iisc.ac.in Website: anubhabreveals.github.io/home

Phone: (+91) 7872739656 LinkedIn: linkedin.com/in/anubhab-majumder-88949066

Research interests Conceptual design synthesis, multiple-state mechanical devices, creativity, functional modelling, kinematics

and robotics.

Education Indian Institute of Science (IISc) Bengaluru, Karnataka

Ph. D. in Engineering August 2018 – Present

Supervisor: Prof. Amaresh Chakrabarti. CGPA: 8.83.

Indian Institute of Technology (ISM) Dhanbad Dhanbad, Jharkhand

M. Tech. in Mech. Engg. (spl. Machine Design)

August 2016 – June 2018

Supervisor: Dr. Sanjoy K. Ghoshal. OGPA: 9.89.

Govt. College of Engg. and Textile Technology Berhampore, West Bengal

B. Tech. in Mechanical Engineering August 2012 – June 2016

DGPA: 9.00.

Honors and Distinguished Paper Award (ICoRD 2023) 2023

scholarships Gold Medal (Indian Institute of Technology (ISM), Dhanbad) 2018

Best Paper Award (ICMMRE 2017) 2017 The Central Sector Scheme of Scholarship for College and University Students (MHRD, Department of

The Central Sector Scheme of Scholarship for College and University Students (MHRD, Department of Lighter Education, Consumment of India)

Higher Education, Government of India) 2012-2016

Publications **Journals:**

Majumder, A., & Chakrabarti, A. (2022). A Tool for Supporting Conceptual Design of Multiple State Mechanical Devices. *Defence Science Journal*, 72(2), 217-226.

Bhatt, A. N., Majumder, A., & Chakrabarti, A. (2021). Analyzing the modes of reasoning in design using the SAPPhIRE model of causality and the Extended Integrated Model of Designing. *Artificial Intelligence for Engineering Design, Analysis and Manufacturing 35, 384–403.*

Chattopadhyay, P., Ghoshal, S. K., **Majumder, A.** (2020). IMPLEMENTATION OF PIECEWISE SINE FUNCTIONS ON LIMBLESS ROBOT LOCOMOTION. *International Journal of Robotics and Automation*, *35*(4).

Chattopadhyay, P., Ghoshal, S., **Majumder, A.**, Dikshit, H. (2018). Locomotion Methods of Pipe Climbing robots: A Review. *Journal of Engineering Science and Technology Review, 11(4).*

Conference Proceedings:

Patra, A., Patel, M., Chattopadhyay, P., **Majumder, A.**, Ghoshal, S. K. (2020). A Bio-inspired Climbing Robot: Dynamic Modelling and Prototype Development. *In Recent Advances in Mechanical Engineering (pp. 191-209). Springer, Singapore.*

Patel, M., Patra, A., Chattopadhyay, P., **Majumder, A.**, Ghoshal, S. K. (2020). Evolution of a Modular Limbless Crawling and Climbing Robot. *Advanced Science, Engineering and Medicine 12.11 (2020): 1371-1377.*

Majumder, A., Patra, A., Patel, M., Chattopadhyay, P., Ghoshal, S. K. (2019). Locomotion Study of a Hyperredundant Modular Robot Using Artificial Neural Networks. *In Proceedings of the Advances in Robotics 2019 (pp. 1-6)*.

Chattopadhyay, P., **Majumder**, **A.**, Dikshit, H., Ghoshal, S. K., Maity, A. (2018, June). A bio-inspired climbing robot: design, simulation, and experiments. *In IOP conference series: materials science and engineering (Vol. 377, No. 1, p. 012105). IOP Publishing.*

Chattopadhyay, P., Dikshit, H., **Majumder, A.**, Ghoshal, S., Maity, A. (2018, April). Dynamic analysis of a bio-inspired climbing robot using ADAMS-Simulink co-simulation. *In AIP conference proceedings (Vol. 1952, No. 1, p. 020015)*. *AIP Publishing LLC*.

Workshops Attended PBL South Asia Training Workshop for Faculty and Advanced Students at the Indian Institute of

Technology, Bombay on 19 - 30 Aug 2019.

Volunteering Local Organising Committee Member

9 Jan 2023 – 11 Jan 2023

Experiences

9th International Conference on Research Into Design, IISc, Bangalore, India.

Local Organising Committee Member

10 Jan 2022 – 11 Jan 2022

2nd International Conference on I4.0 and Advanced Manufacturing, IISc, Bangalore, India.

Student Organising Committee Member

7 Jan 2021 – 10 Jan 2021

8th International Conference on Research into Design, IIT, Bombay, India.

Volunteer/ Host 16 Dec 2019 – 17 Dec 2019

Pre-Conference Workshop of 7th International Conference on PLMSS.

Volunteer 28 Jun 2019 – 29 Jun 2019

1st International Conference on Industry 4.0 and Advanced Manufacturing, IISc, Bangalore, India.

Mentor 8 May 2019 – 12 May 2019

"IISC DBox" - The Design Thinking Workshop held at Kendriya Vidyalaya, IISc organized by CPDM, IISc,

Bangalore.

Local Organising Committee Member

9 Jan 2019 – 11 Jan 2019

7th International Conference on Research Into Design, IISc, Bangalore, India.

Skills **Software**

Proficient in: MSC ADAMS, AUTOCAD. Familiar with: MAPLE, MATLAB, Tecnomatix.

Programming

LaTex, HTML, PHP, JavaScript, Python.

Languages

Bengali, English, Hindi

13 Jul 2015 - 31 Jul 2015

Mejia Thermal Power Station, West Bengal, India