

Dr. Mahesh S. Kavre

PhD, Mechanical Engineering
(Assistant Professor)

Email: maheshkavre@ternaengg.ac.in



Address for Correspondence: Department of Mechanical Engineering,
Terna Engineering College, Plot-12,
Sector-22, Nerul, Navi Mumbai, 400706.

Professional Qualification:

- **Ph.D. in Mechanical Engineering, 2025**
University of Mumbai, Maharashtra, India.
- **Master of Technology (CAD/CAM & Robotics), 2017**
K. J. Somaiya College of Engineering, Mumbai University, Maharashtra.
- **Bachelor of Mechanical Engineering, 2015**
Datta Meghe College of Engineering, University of Mumbai, Mumbai, Maharashtra.

About me:

I, Prof. Mahesh S. Kavre, Assistant Professor in the Department of Mechanical Engineering at Terna Engineering College, Navi Mumbai (University of Mumbai). Awarded a PhD in Mechanical Engineering from the University of Mumbai in 2025. I completed MTech (CAD/CAM and Robotics) in 2017 and BE in Mechanical Engineering in 2015 from the University of Mumbai. I have 7 years of teaching experience. My research interests include cloud manufacturing, smart manufacturing, and Industry 4.0.

Major Subjects:

- CAD/CAM
- Finite Element Analysis
- Mechatronics
- Automation and Artificial Intelligence
- GD&T

Citation Analysis:

249 citations (h-index 7 and i10-index 6) in Google Scholar

<https://scholar.google.com/citations?user=8Vi-yLMAAAAJ&hl=en>

List of Publications:

- **Journal papers (UGC care/ SCOPUS/ SCI indexed):**

1. **Mahesh S. Kavre**, Vivek K. Sunnapwar, Bhaskar B. Gardas, (2025). “Analysing the Role of Cloud Manufacturing for Achieving Sustainable Business Performance in the Era of Digital Economy”, *International Journal of Organizational Analysis*, (In press) DOI: [10.1108/IJOA-04-2025-5424](https://doi.org/10.1108/IJOA-04-2025-5424).
2. **Mahesh S. Kavre**, Vivek K. Sunnapwar, (2025), ‘A structured framework for digital transformation in manufacturing MSMEs: an ISM approach’, *International Journal of Industrial and Systems Engineering*, (In press) DOI: [10.1504/IJISE.2025.10071963](https://doi.org/10.1504/IJISE.2025.10071963)
3. **Mahesh S. Kavre**, Vivek K. Sunnapwar, Bhaskar B. Gardas, (2025). “Strategic digitization for sustainable growth in emerging markets: empowering manufacturing MSMEs for a greener future”, *International Journal of Organizational Analysis*. DOI: [10.1108/IJOA-06-2024-4597](https://doi.org/10.1108/IJOA-06-2024-4597)
4. Sahil V. Dharia, Chandrashekhar M. Choudhari, **Mahesh S. Kavre** (2025), ‘From waste to resource: investigating the load carrying capacity of recycled plastic waste’, *International Journal of Environment and Waste Management*. (In press) DOI: [10.1504/IJEW.2025.10069177](https://doi.org/10.1504/IJEW.2025.10069177)
5. Md Tahsin Akhtar, **Mahesh S. Kavre**, (2025), ‘An Artificial Neural Network-Based Prediction of Critical Nugget Diameter in Resistance Spot Welding of Automotive Steels’, *International Journal of Industrial and Systems Engineering*, (In press). DOI: [10.1504/IJISE.2025.10070854](https://doi.org/10.1504/IJISE.2025.10070854)
6. **Mahesh S. Kavre**, Vivek K. Sunnapwar, Bhaskar B. Gardas, (2024), ‘Analysing hindrances to digital disruption with a focus on cleaner cloud manufacturing’, *Kybernetes*. DOI: [10.1108/K-09-2023-1821](https://doi.org/10.1108/K-09-2023-1821)
7. Swati V. Narwane, Irfan Siddavatam, **Mahesh S. Kavre**, (2024), ‘Determinants of Blockchain-Machine Learning Adoption in Additive Manufacturing’, *International Journal of Industrial and Systems Engineering*, 48 (2), 198-227. DOI: [10.1504/IJISE.2024.141593](https://doi.org/10.1504/IJISE.2024.141593)
8. **Mahesh S. Kavre**, Vivek K. Sunnapwar, Bhaskar B. Gardas, (2023), ‘Cloud manufacturing adoption: a comprehensive review’, *Information Systems and e-Business Management*, DOI: [10.1007/s10257-023-00638-y](https://doi.org/10.1007/s10257-023-00638-y)
9. **Mahesh Kavre**, Vaibhav Narwane, Bhaskar Gardas, Vivek Sunnapwar, (2023), ‘Role of Human Factors in Cloud Manufacturing Adoption across Manufacturing Micro, Small, and Medium Enterprises’, *International Journal of Computer Integrated Manufacturing*, 36 (4), 611-633. DOI: [10.1080/0951192X.2022.2128215](https://doi.org/10.1080/0951192X.2022.2128215)
10. Sahil V. Dharia, Ajit J. Khushwah, Chandrashekhar M. Choudhari, **Mahesh S. Kavre** (2023),

‘Optimum source segregation bin for household solid waste and waste plastic recycling’, *Journal of Material Cycles and Waste Management*, 25, 2312-2325 DOI:[10.1007/s10163-023-01689-6](https://doi.org/10.1007/s10163-023-01689-6)

11. **Mahesh Kavre**, Bhaskar Gardas, Vaibhav Narwane, Nima Jafri Navimipour, (2022) ‘Evaluating the Effect of Human Factors on Big Data Analytics and Internet of Things Adoption in the Manufacturing MSMEs’, *IT Professional*, 24 (4), 17-26. DOI: [10.1109/MITP.2022.3156956](https://doi.org/10.1109/MITP.2022.3156956)
12. VS Narwane, RD Raut, BB Gardas, **MS Kavre**, BE Narkhede, (2019) ‘Factors affecting the adoption of cloud of things: The case study of Indian small and medium enterprises’ *Journal of Systems and Information Technology*, 21 (4), 397-418. DOI: [10.1108/JSIT-10-2018-0137](https://doi.org/10.1108/JSIT-10-2018-0137)
13. VS Narwane, BE Narkhede, RD Raut, BB Gardas, P Priyadarshinee, **MS Kavre** (2019) ‘To identify the determinants of the CloudIoT technologies adoption in the Indian MSMEs: structural equation modelling approach’ *International Journal of Business Information Systems*, 31 (3), 322-353. DOI: [10.1504/IJBIS.2019.101110](https://doi.org/10.1504/IJBIS.2019.101110)

- **International Conference Papers:**

1. **Mahesh S. Kavre**, Vivek K. Sunnapwar (2024) ‘Exploring the Barriers to Adopt Digital Technologies among Manufacturing MSMEs’, 4th annual International Conference on “Harmony in Innovation: Navigating Global Business Landscape through Emerging Technologies and Dynamic Management”, organized by Dr. D. Y. Patil B-School, Pune, during 3rd – 5th April, 2024.
2. Abhishek Dixit, Sumit Dhage, **Mahesh Kavre**, Ajit Khushwah, (2023) ‘Design & Development of Waste Plastic Recycling Unit’, The 2nd International Conference on Recent Advances in Materials, Manufacturing and Machine Learning (RAMMML). Yeshwantrao Chavan College of Engineering, Nagpur, Technically sponsored by NPTC Group of Colleges, United Kingdom.
3. **MS Kavre**, AS Gadekar, & Y. Gadhade, (2019, December) ‘Internet of Things (IoT): A Survey’, IEEE Pune Section International Conference, MIT-World Peace University, (PuneCon) (pp. 1-6), IEEE.
4. MS Sawant, T Kadam, MN Kshirsagar, & **MS Kavre**, ‘Design Automation of Marine Propeller Shaft’ (2018) 4th International Conference On Engineering Confluence, Navi Mumbai, India.
5. **MS Kavre**, VS Narwane, RD Raut (2017) ‘Cloud adoption in various domains & factors influencing its adoption’, International Conference on Emanations in Modern Technology & Engineering (ICEMTE).

- **Design Patent**

1. Skin Grafting Tool, Design No. 381570-001, Dated: 15/03/2023.
2. Solar-Powered System for Converting Seawater to Potable, Design No. 386733-001, Dated: 22/05/2023.

Research and Scholarly Contributions:

Actively serving as a reviewer for several peer-reviewed and Scopus-indexed journals, a few of them are as follows:

1. Reviewer for journal '*Journal of Product Innovation Management*' by Wiley Publication (Indexed in SCOPUS).
2. Reviewer for journal '*International Journal of System Assurance Engineering and Management*' by Springer Nature (Indexed in SCOPUS).
3. Reviewer for journal '*International Journal of Industrial and Systems Engineering*' by InderScience (Indexed in SCOPUS).
4. Reviewer for journal '*Information Systems and e-Business Management*' by Springer Nature (Indexed in SCOPUS).
5. Reviewer for journal '*Journal of Management & Organization*' by Australian and New Zealand Academia of Management (ANZAM) & Cambridge University Press (Indexed in SCOPUS).
6. Reviewer for journal '*Discover Sustainability*' by Springer (Indexed in SCOPUS).
7. Reviewer for journal '*Applied Sciences*' by Springer (Indexed in SCOPUS).
8. Reviewer for journal '*International Social Science Journal*' by Wiley Publication (Indexed in SCOPUS).
9. Reviewer for journal '*Frontiers in Sustainable Food Systems*' by Frontiers (Indexed in SCOPUS).
10. Reviewer for journal '*IEEE Consumer Electronics Magazine*' (Indexed in SCOPUS).

Training and workshops

No.	Training/Course/ Workshop	Year	Duration	Venue
1	Geometric Dimensioning and Tolerancing (GD&T): Basics	2025	1 Week	Udemy
2	Circular Economy for Green Energy and Carbon	2025	1 Week	SVNIT

	Neutrality			(ATAL)
3	Multi Attribute decision Making and Its industrial applications	2024	1 Week	SVNIT
4	Artificial Intelligence and Machine Learning	2024	1 Week	ATAL
5	Digital twin-based predictive maintenance approach for Industry 4.0 using machine learning techniques	2023	1 Week	VJTI (ATAL)
6	NITTT Module 1	2023	4 Weeks	NITTT
7	Smart manufacturing - Scope and challenges in research	2022	1 Week	ATAL
8	CNC Machining (Hands-On)	2021	2 Week	TEC
9	Industrial Internet of Things (IIoT)	2021	1 Week	ATAL
10	Research methods in science, engineering and technology	2021	1 Week	VGCOE, Thane
11	Introduction to Big Data	2020	3 Week	Coursera
12	Industrial IoT on Google Cloud Platform	2020	2 Week	Coursera
13	Introduction to Applied Machine Learning	2020	4 Week	Coursera
14	Mechatronics	2020	1 week	ATAL
15	3D Printing and Design	2020	1 week	NITW
16	Introduction to Research	2019	8 week	NPTEL
17	Cognizance of Industry 4.0 towards implementation and security	2019	1 week	KJSCE
18	Faculty Development Program on Industrial Automation	2019	2 week	B & R Automation
19	3D Printing for Industrial and Biomedical Applications	2019	2 week	G. H. Raisoni
20	Finite Element Analysis	2018	8 week	NPTEL
21	FDP 101x	2018	5 week	IITBX
22	FDP 201x	2018	4 week	IITBX
23	Workshop on Effective research methodology	2018	2 days	TEC
24	Induction Training Program	2017	20 days	IITB

Experience:

8 years of Teaching Experience at Terna Engineering College (03/07/2017 - till date)

Professional Association:

Society of Automotive Engineers (SAE)-Member

Software Tools:

1. Inventor
2. PTC Creo
3. SolidWorks
4. ANSYS

Responsibilities Handled:

- Academic program coordinator of the department
- Timetable incharge
- Faculty Coordinator for SUPRA and Formula Electric Vehicle student competition.
- Coordinator for a *Three week Skill development program on “CNC Machining”* Organized by department of mechanical engineering, Terna Engineering College, Nerul, November 2021.
- Coordinator for *five days online Faculty Development Program on ‘Innovation, Entrepreneurship and its Relevance in Industry 4.0 practices in post covid-19 situation’*, June 2020.
- Coordinated online ‘3D design competition’ at TEC, July 2020.
- TEC Sports coordinator
- IQAC member

Declaration

I hereby declare that the foregoing information is correct and complete to the best of my knowledge.

Name: Prof. Mahesh S. Kavre

Place: Navi Mumbai