



AISSMS

COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय

An Autonomous Institute Affiliated with
Savitribai Phule Pune University

Accredited by NAAC with "A+" Grade | NBA - 7 UG Programmes



Newsletter of Robotics and Automation Department

RoboVision

Academic Year 2025-26 SEM-2

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Robotics and Automation
Department

Our Inspiration

Shri
Shahu Chhatrapati
Maharaj

President, AISSMS



From Principal's Desk



Dr.D.S.Bormane

It gives me immense pleasure to present the **Second Semester Edition of ROBOVISION 2025-26**, the official newsletter of the Robotics and Automation Engineering Department. This edition reflects the department's dedication to academic excellence, innovation, research, and industry-oriented learning. The achievements of our students and faculty in technical events, projects, publications, and research activities demonstrate their commitment to excellence and continuous growth.

I congratulate the department for its remarkable accomplishments during the semester and appreciate the sincere efforts of the faculty, staff, and students. I am confident that the department will continue to inspire innovation, uphold academic standards, and contribute significantly to technological advancement.



Dr. Priya.S.Gajjal

HOD's Message

It gives me great pleasure to present the **Second Semester Edition of ROBOVISION 2025-26**. This edition reflects the dedication, innovation, and achievements of our faculty and students in academics, research, technical events, and industry-oriented projects. I appreciate everyone's sincere efforts and commitment to excellence. I wish the department continued success and greater achievements in the years ahead.

Department Vision:

- To produce responsible professionals in the field of Robotics & Automation Engineering.

Department Mission:

- Impart state of art technical education in Robotics & Automation Engineering.
- Inculcate sustainable skills in automation technologies, research and learning attitudes.
- Committed to fulfil the needs of society in the manufacturing and service sector.

Department Goals:

- Deliver quality technical education.
- Encourage innovation, research, and project-based learning.
- Strengthen industry interaction and practical skills.

Department Of Robotics And Automation

The **Department of Robotics and Automation Engineering** is committed to academic excellence, innovation, and industry-oriented education, empowering students with the knowledge and practical skills required to excel in the field of robotics and automation. Through quality teaching, modern laboratories, technical workshops, seminars, industrial visits, research, and project-based learning, the department fosters creativity, critical thinking, and professional growth.

ROBOVISION 2025-26, the official newsletter of the department for the **Second Semester of AY 2025-26**, highlights our academic achievements, technical activities, innovative projects, faculty contributions, and student accomplishments. It reflects the department's continuous pursuit of excellence and its commitment to nurturing future-ready engineers.

EDITOR'S NOTE

Welcome to the **Second Semester Edition of ROBOVISION 2025-26**, the official newsletter of the **Robotics and Automation Engineering Department**. This edition captures the department's key achievements, technical events, workshops, research activities, and student accomplishments during the semester. It reflects the enthusiasm, innovation, and dedication of our faculty and students. We hope this newsletter informs, inspires, and celebrates the spirit of continuous learning and technological excellence. We sincerely thank everyone who contributed to making this edition a success.

FACULTY ACHIEVEMENTS

- **Dr. P. S. Gajjal** received the **Best Paper Award** at the **IETE and ISF Congress**, organized by **Adani University, Ahmedabad**, held on **7th-8th February 2026**, in recognition of outstanding research contributions.
- **Dr. N. G. Shekapure** was honored with the **"IUCEE Individual Honorary Member – Award for Excellence in Teaching"** during **ICTIEE 2026**, recognizing exceptional dedication and excellence in engineering education.

BOOKS /ARTICLES PUBLICATIONS

Author	Title of the Book	Published by	ISBN	Year
Dr A S Ubale	Architecture and Protocols for Data Transmission in VANET-17(Book Chapter)	Springer Nature	978-981-96-5190-0	June 2025
Dr A S Ubale	Case Studies and Real-World Deployment Examples of VANETs (Vehicular Ad-Hoc Networks) (Book Chapter)	Springer Nature	978-981-96-5190-0	June 2025

FACULTY PUBLICATIONS

- **Dr. P. S. Gajjal** presented a research paper titled "**Design and Simulation of an Edge AI-Powered Multisensor Surveillance Quadcopter**" at the IETE Seminar and ISF Congress 2026, organized by **Adani University, Ahmedabad**.
- **Dr. P. S. Gajjal** presented a research paper titled "**Metal Hydride Hydrogen Compressors for Industrial-Scale Green Hydrogen: A Techno-Economic Analysis and Market Readiness Assessment**" at the International Conference on Emerging Markets 2026, organized by the National School of Banking, Bangalore.
- **Mr. Y. R. Chandwade** presented a research paper titled "**A Comprehensive Review of Swarm Robotics**" at the **2nd International Conference on Sustainable Industry 4.0: Innovations for a Greener Future (ICSI 2026)**, organized by Dr. D. Y. Patil Institute of Technology, Pimpri, Pune.
- **Mr. M. L. Chanpur** presented a research paper titled "**Computer Vision-Based Robotic Arm for Colour Sorting**" at the **2nd International Conference on Sustainable Industry 4.0: Innovations for a Greener Future (ICSI 2026)**, organized by Dr. D. Y. Patil Institute of Technology, Pimpri, Pune.
- **Dr. A. S. Ubale** presented a research paper titled "**Simulation-Driven Development of IoT-Based Predictive Maintenance**" at the **2nd International Conference on Sustainable Industry 4.0: Innovations for a Greener Future (ICSI 2026)**, organized by Dr. D. Y. Patil Institute of Technology, Pimpri, Pune.
- **Mr. M. P. Bauskar and Mr. M. L. Chanpur** presented a research paper titled "**Robot Path Planning & Simulation Using RoboDK: A Study on Trajectory Optimization for Industrial Applications**" at the **6th National Conference on NCiet 2026**, organized by AISSMS College of Engineering, Pune.
- **Mr. M. P. Bauskar and Mr. Y. R. Chandwade** presented a research paper titled "**Autonomous Colour-Based Object Sorting Using RoboDK and Python: A Simulation Study for Industrial Automation**" at the **6th National Conference on NCiet 2026**, organized by AISSMS College of Engineering, Pune.

STUDENTS ACHIEVEMENT

- **RoboVyu Club** members **Ganesh Pal, Sakshi Surwase, Neha Phadtare, Bhargavi Newale, and Shreyash Shrishette** emerged as **Semi-Finalists** in **AtomQuest**, a prestigious robotics competition organized by **Atomberg Technologies**. Their achievement reflects the team's innovation, technical expertise, and problem-solving abilities in the field of robotics.
- **Team RoboVyu** secured a place as **Finalists in DD Robocon, held at IIT Delhi**, one of India's premier national robotics competitions. The team's outstanding performance showcased their excellence in robot design, automation, teamwork, and engineering innovation.



OTHER SPECIFIC ACTIVITES

- **Dr. P. S. Gajjal** coordinated an **E-Waste Collection Drive** on 23th April 2026, with the active participation of **80 students**, promoting environmental awareness and responsible disposal of electronic waste.
- **Dr. P. S. Gajjal** organized a **Seed Ball Activity** on 28th April 2026, **engaging 78 students** in an initiative to promote environmental conservation and sustainable practices.
- **Dr. A. S. Ubale** conducted an **Ad-Mad Show Competition on BIS Standards: Building Safe and Smart Robotic Systems** on 17th March 2026, **benefiting 33 students** by enhancing their awareness of safety standards and communication skills
- **Mr. M. L. Chanpur** organized the BE Farewell on 4th May 2026, **attended by 33 final-year students and 11 faculty members**, celebrating the achievements of the graduating batch and wishing them success in their future endeavors.

PATENT DETAILS OF DEPARTMENT

Sr No	Faculty Coordinator	Title of patent	Status		
			Date of Filing	Date of Publication / Grant	National / International
01	Dr P S Gajjal	Onion and Garlic Harvesting Machine	06/05/25	29/09/2025	National
02	Dr P S Gajjal	Arduino Based Fire Fighting Device	17/11/25	06/02/2026	National
03	Dr P S Gajjal	Autonomous Ultraviolet Sterilization Device	17/11/25	12/02/2026	National
01	Dr N G Shekapure	IOT Based/ Solar Empowered Agriculture Robot	14/03/2023	24/05/2023	National

FACULTY DEVELOPEMENT PROGRAMME ATTENDED

- **Dr. P. S. Gajjal** successfully completed a Faculty Development Programme (FDP) on "**Smart Manufacturing with Industry 4.0: Robotics, AI and IoT**", organized by AISSMS College of Engineering, from 16th–21th February 2026.
- **Dr. P. S. Gajjal** also participated in the FDP on "**Green Hydrogen Technologies: Production, Storage and Application for a Sustainable Future**", organized by AISSMS College of Engineering.
- **Dr. N. G. Shekapure** attended a One-Day FDP on "**Industry 5.0 Powered by Agentic AI, IoT & Robotics Automation for Digital Transformation**", organized by The Institution of Engineers (India), Pune Local Centre, on 12th December 2025.
- **Dr. N. G. Shekapure** successfully completed the **Engineering Education Research Course (EER)**, a six-month programme organized by IUCEE, from August 2025 to January 2026.
- **Dr. N. G. Shekapure** also completed the Faculty Development Programme on "**Smart Manufacturing with Industry 4.0: Robotics, AI and IoT**", organized by AISSMS College of Engineering, from 16th–21th February 2026.
- **Mr. V. D. Dholle** completed the Faculty Development Programme on "**Smart Manufacturing with Industry 4.0: Robotics, AI and IoT**", organized by AISSMS College of Engineering, from 16th–21th February 2026.
- **Mr. S. S. Kallurkar** participated in the FDP on "**Quality Content Creation Using Graphics and Animation**", organized by NITTTR Chandigarh, from 8–12 June 2026. He also completed the FDP on "Smart Manufacturing with Industry 4.0: Robotics, AI and IoT", organized by AISSMS College of Engineering, from 16th–21th February 2026.
- **Mr. S. N. Chiwande** successfully completed the Faculty Development Programme on "**Smart Manufacturing with Industry 4.0: Robotics, AI and IoT**", organized by AISSMS College of Engineering, from 16th–21th February 2026.
- **Mr. M. L. Chanpur** attended the FDP on "**Smart Manufacturing with Industry 4.0: Robotics, AI and IoT**", organized by AISSMS College of Engineering, from 16–21 February 2026. He also participated in the FDP on "Green Hydrogen Technologies: Production, Storage and Applications for a Sustainable Future", organized by AISSMS College of Engineering, from 23rd–28th March 2026.

SEMINAR / WEBINAR

- **Dr. P. S. Gajjal** participated in the **India AI Impact Summit**, organized by Sankhya Upskilling (OPC) Pvt. Ltd., on 30th January 2026.
- **Dr. N. G. Shekapure** attended the workshop on "**Structured Framework for a Senior Capstone Design Project Course**" at ICTIEE 2026 on 8 January 2026. He also participated in the workshops on "Outcomes-Based Education: Programmatic Accreditation and the Assessment of Student Learning & Outcomes" on 9th January 2026 and "**Agentic AI in Education**" on 10th January 2026, both organized as part of ICTIEE 2026.
- **Mr. Y. R. Chandwade** attended the Workshop on **AI Tools and ChatGPT**, organized by be10X, on 15th February 2026.
- **Dr. A. S. Ubale** participated in the India AI Impact Summit, organized by Sankhya Upskilling (OPC) Pvt. Ltd., on 30th January 2026.

PAPER PUBLISHED IN JOURNALS

S. No	Au-thors	Document Details	Year	Source De-tails	ISBN/ISSN	Pub-lisher
1	M P Bauskar	Investigation Of Performance Of Manufacturing Of A Two-Lobe Hydrodynamic Bearing Using CNC Machining	2025	International Journal of Environmental Sciences Vol. 11 No. 18s,2025	ISSN: 2229-7359	IJES
2	M P Bauskar	Verification of Forming Force, Major & Minor Strain for UHMWPE for SPIF using Experimental	2025	International Journal of Environmental Sciences Vol. 11 No. 16s,2025	ISSN: 2229-7359	IJES

PHOTOGRAPHS OF ACTIVITIES

Glimpse of Industrial Visit



Industrial Visit to Speciality Sintered Products Pvt Ltd, Shirwal



TE and SE Students of RoboVyu Club explaining the project of DD Robocon

