ZF - SRM CENTER OF EXCELLENCE FOR SMART FACTORY INITIATIVES

Keep In Touch With Us

044 27417286

muralig@srmist.edu.in

Ground Floor, Hi-Tech Block, Main Campus, SRMIST, Kattankulathur-603203

ABOUT THE CENTER

The center was established on February 12, 2020, as a collaborative effort from SRMIST and ZF (industry partner) with a vision to mold young minds toward the future of Industry technology. The center aims to integrate various technologies like IoT, big data, robotics, etc. to solve industrial problems with a mission of bridging the gap between academic research and industry.

VISION

To bridge the gap between academia, industry, students and society at large. To conduct awareness programs on current industry practices cum technology and provide skill training through training sessions, workshops, internships ,short term courses etc. across all elements of Industry 4.0

MISSION

The center aims to contribute to each of the stakeholders in the following way :

✅ Students

- *Education and Training*
- *Skill Development*
- *Industry Exposure*
- *Networking Opportunities*

✅ Academia

- *Research and Innovation*
- *Collaboration with other academic institutions, research centers and industries*
- *Publication and Conferences*
- *Attract funding and grants for research initiatives, infrastructure development, and student scholarships*

✅ Industry

- *Technology Transfer*
- *Provide consulting services, collaborative projects, technology assessments, and customized solutions*
- *Workforce Development*

✅ Society

- *Economic Impact*
- *Sustainability and environment*
- *Community Engagements*
- *Policy and advocacy*

MEET **THE TEAM**

Dr. Kingsly Jeba Singh
Chairperson, School of Mechanical Engineering
Professor, Department of Mechanical Engineering
Specialization: Industry 4.0, Engineering Design, AI

Dr. G Murali
Professor & Head, Department of Mechatronics Engineering
Specialization: Industry 4.0, Digital Twin, Bio Mimicry

Dr. Revathi Venkataraman
Chairperson, School of Computing
Professor, Department of Networking and Communications
Specialization: Wireless networks, IoT Security, Sensor networks

Dr. R Senthilnathan
Center Head, Center for Immersive Technologies
Professor, Department of Mechatronics Engineering
Specialization: Robotics, AI, Immersive Technologies (AR,VR,MR)

Dr. Eswaran P
Professor, Department of Electronics and Communication
Specialization: Cyber Physical Systems, IoT , Industrial automation

Dr. Ranjith Pillai R
Assistant Professor, Department of Mechatronics Engineering
Specialization: Robotics, AI, IoT ,Mechatronics

Dr. Vaishnavi Moorthy
Assistant Professor, Department of Networking and Communications
Specialization: AR/VR, Cybersecurity, Cloud Computing

Mr. Karthikeyan N
Assistant Professor, Department of Mechanical Engineering
Specialization: Industry 4.0, Micro Machining , Additive Manufacturing

INFRASTRUCTURE

The center has infrastructure facilities like a meeting room, training arena, and demo arena with industrial equipments. The center also has lab equipments and items to support projects in the area of Industry 4.0

Meeting Room

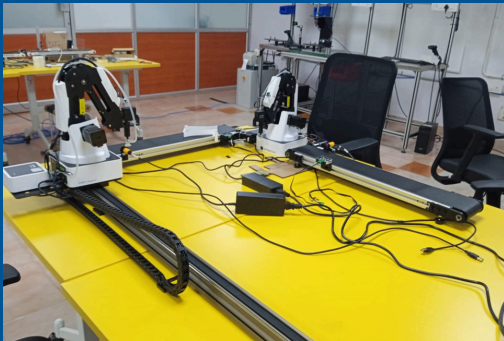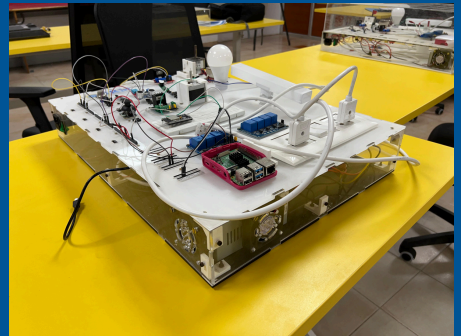**Development and Demo Arena**

Training Arena

Key Equipment's for training and demonstration

I4.0 module on Dobot Magician and accessories

IoT Trainer kit

Bearing Cap Assembly Process and inspection Station *

Plate assembly and inspection Station *

* Industry Sponsored

ROADMAP

- Online courses
- Product market
- Support B.Tech programs specialized towards I4.0
- MoU's with industries and R&D centers

Leap Forward

4

- New space with training and meeting room facilities
- Lab infrastructure development
- Indigenous product development with students
- Training for industries in the area of I4.0
- Joint project proposal submissions
- Student internships and training programs

Bringing a new shape

3

- Multidisciplinary Team formation
- Infrastructure plan and action
- Industry academia training - Faculty Immersion
- Plan of action for the center
- Outreach activities
- Train the trainer programs
- Student training and skill development

2

Start of a mission

- Inauguration of the Center of Excellence for Smart Factory Initiatives on 12th February 2020.
- Team Visit and discussion on possible collaboration with the Wabco team

1

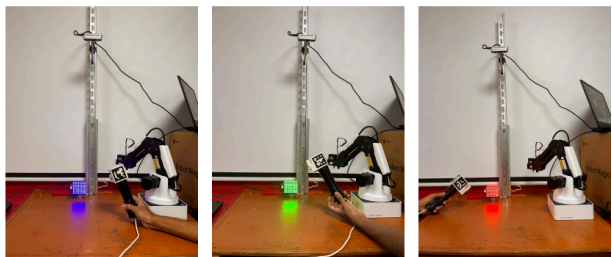**Inception**

GLIPMPSES OF
EVENTS

Inauguration of ZF SRM CoE for Smart Factory Initiatives

MoU signing with AVNL, Avadi

Training at AVNL Avadi

Hands on training on IoT implementation

Projects Demonstration to ZF team

MoU Signing with ZF

Training on Dobot Magician and related system

AVNL delegates visit to ZF SRM CoE for Smart Factory Initiatives Lab

Lab visit and Training for team from AVNL, Avadi

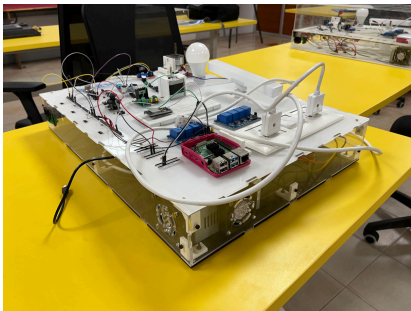Industry Delegate visit for technology collaboration
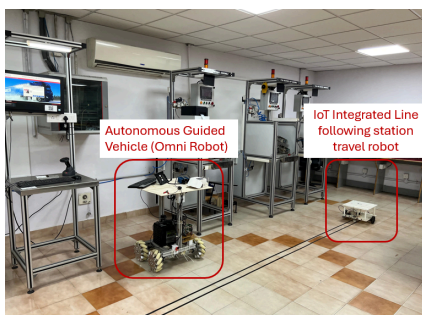
OUR **PROJECTS**

Center Projects

The Center supports students, faculty, and research scholars for projects in the area of Industry 4.0. The support is either financial aid for components, access to infrastructure, technical guidance and industry collaboration and support.

IoT Trainer Kit developed in lab

Development of interactive device for Robot programming

Autonomous Guided Vehicle (Omni Robot)

IoT Integrated Line following station travel robot

Conveyer Sorting Station integrated with IoT

Funded Projects

- An IoT Integrated Real-Time Water Quality Monitoring System for Treated Domestic Water for Swachh Bharat Adopted Villages - SERB, SURE (Joint Proposal with REACH SRM, Submitted)
- Strengthening Capacities in Higher Education through Climate Resilient Digital Twins for Sustainable Municipal Solid Waste Management in South Asia - Erasmus Mundus (Submitted)
- An orbital retractor with inbuilt pressure sensor: A novel design of biomedical device -Indian Council for Medical Research [ICMR] (Ongoing)

LET'S WORK
TOGETHER

044 27417286

muralig@srmist.edu.in

Ground Floor, Hi-Tech Block, Main Campus, SRMIST, Kattankulathur-603203