महर्षी कर्वे स्त्री शिक्षण संस्था
ज्ञान
बल सेवा
"शीलं परं भूषणम्"
स्थापना-१८९६

ASME®
SETTING THE STANDARD
CUMMINS STUDENT SECTION

MKSSS's Cummins COLLEGE OF ENGINEERING FOR WOMEN, PUNE

ASME GAZETTE

>>> THE OFFICIAL NEWSLETTER OF ASME CCOEW <<<

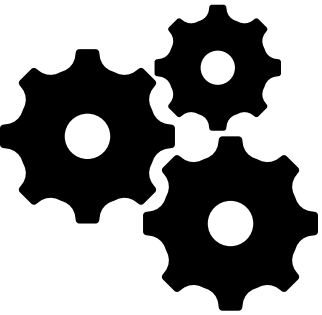
- Edited by Mugdha Deshmukh and Vedika Nalla

>>> OUR MISSION <<<

To serve diverse global communities by advancing, disseminating and applying engineering knowledge to improve the quality of life and communicate the excitement of engineering.

>>> OUR VISION <<<

To be an essential resource for mechanical engineers and other technical professionals throughout the world for solutions that benefit humankind.



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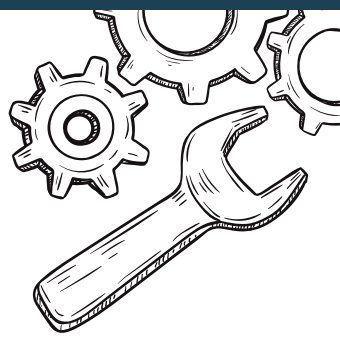


ABOUT

ASME (American Society of Mechanical Engineers) is a professional association that promotes the arts, science, and practice of multidisciplinary engineering and allied sciences around the globe. ASME Student's Section of Cummins College was established in September 2015. This is the first student section of its kind established at Savitribai Phule Pune University. In collaboration with this worldwide organization, the ASME Cummins Student Section actively functions, The section includes student members from core engineering branches of Mechanical, Electronics and Telecommunication, and Instrumentation. Several events and activities including guest lectures, workshops, and competitions, industrial visits that help students in their professional development and update them with the current trends in technology are organized by the section. It is a unique and one of the broadest knowledge-sharing platforms for students of Mechanical and non-mechanical Engineering. It includes helping students understand their opportunities and responsibilities and developing their interest in engineering. ASME also provides its members with opportunities for student employment, internships, and scholarships. Finally, the student section aids its graduating members in finding jobs through resume books and career fairs. Every year many new students register for ASME memberships.

ASME Cummins Student Section is not just a line on your resume, but it's your career connection!!

ASME CCOEW 2023-24 CORE TEAM

Maithili Deshpande
Chairperson

Aboli Pakhale
Vice-Chairperson

Poorva Ghanekar
Secretary

Chaitrali Kulkarni
Associate Secretary

Swaralee Dabke
Program Head

Surabhi Sangale
Associate Program Head

Mugdha Deshmukh
Documentation Head

Vedika Nalla
Associate Documentation Head

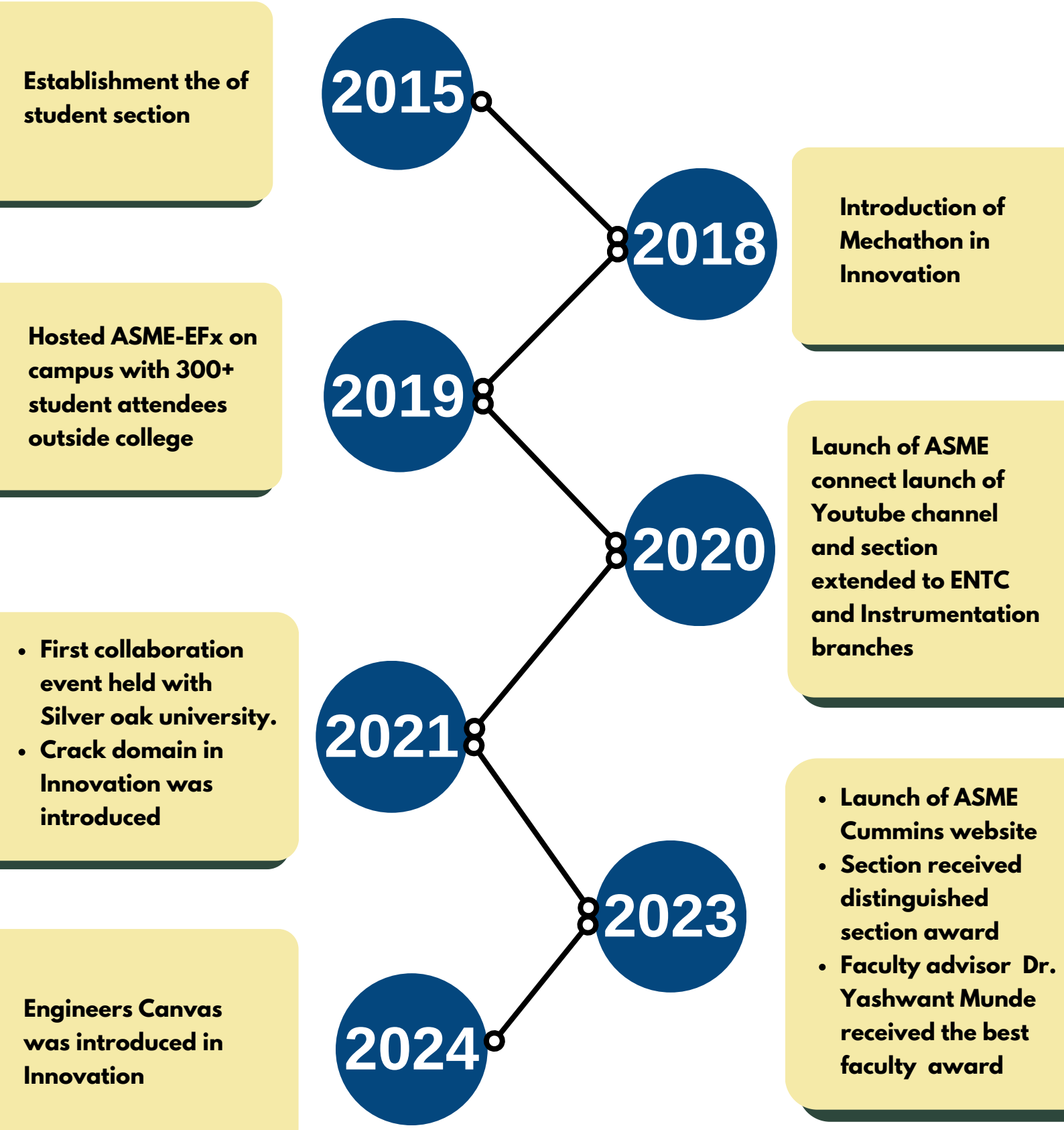
Sanskruti Aserkar
Treasurer

Gayatri Kulkarni
Associate Treasurer

Ananya Bhusare
E-Publicity Head

Smriddhi Mittal
Associate Public Relations Head

MILESTONE MARKER



FROM FACULTY ADVISOR'S DESK

Prof. Dr. Yashwant Munde
(Faculty Advisor)

The ASME Cummins Student Section was established in September 2015. This is the first student section of its kind established in Savitribai Phule Pune University. ASME is unique and one of the broadest knowledge sharing platforms in Mechanical Engineering discipline. The following are the opportunities that student members get through ASME: ASME encourages students to participate in various Conferences in India and abroad.

ASME provides the opportunity to download the ASME publications and journal papers. ASME provides the platform to work as a Leader and as a Team member. ASME develops students' interest in engineering through field trips and guest speakers. ASME also provides its members with opportunities for student employment and for scholarships. Finally, the ASME student section aids its graduating members to find jobs through resume books and career fairs.

FROM THE CHAIRPERSON'S DESK

Ms. Maithili Deshpande
(Chairperson)

I am honored to serve as the Chairperson of the ASME Cummins Student Section. As many of you know, ASME plays a critical role in advancing engineering, and our section is committed to bringing the resources and benefits of this organization to our local community.

Our community stands at the forefront of innovation, driving progress in diverse sectors across the globe. Over the past year, we have witnessed remarkable achievements and breakthroughs that have shaped the future of our profession. As ASME Chairperson, I've gained invaluable leadership skills, expanded my network, and accessed cutting-edge resources. Advocating for our community's interests has been rewarding, fostering a sense of belonging and collaboration. Grateful for the opportunities, I'm committed to advancing mechanical engineering with passion and excellence.

I encourage all of our members to actively participate in our section's activities. Your involvement is essential to our success.

SECTION ACHIEVEMENTS 2023-24

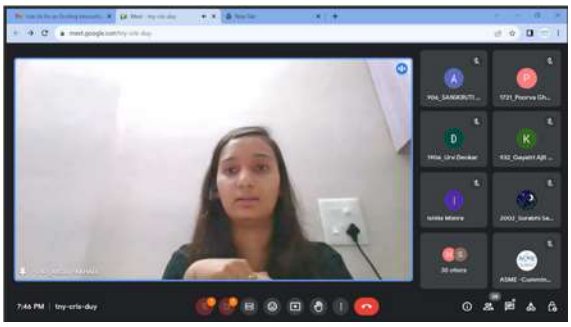
INTERNSHIP TALK 4.0

On 9th September 2023, a comprehensive and enlightening internship talk was organized by ASME Cummins student section.The event aimed to provide valuable insights into the field of mechanical engineering, particularly focusing on internship opportunities and career development. The event featured interns, including Miss Maithili Deshpande (Schneider Electric), Miss Poorva Ghanekar (Ansys), Miss Aboli Pakhale (Hirschvogel), and Miss Swaralee Dabke (Garrett Motion)

Ms. Maithili explaining her interview process

The talk provided an in-depth overview of various internship opportunities available in the mechanical engineering domain, including the application process, skill requirements. The speakers offered valuable career guidance, including advice on resume building, interview preparation and the essential skills.

Ms. Poorva sharing her experience



Ms. Aboli giving internship advice

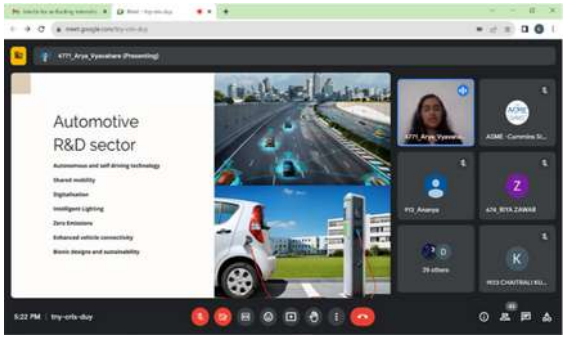
During interactive Q&A sessions, the speakers shared interview preparation strategies, discussed encountered interview questions and highlighted the significance of maintaining a daily journal during internships to document learning experiences. Overall, the session was highly informative, providing valuable guidance and practical tips for students preparing for internships.

-Vaishnavi Pawar (T.Y. Mechanical)

INTERNSHIP TALK 4.0

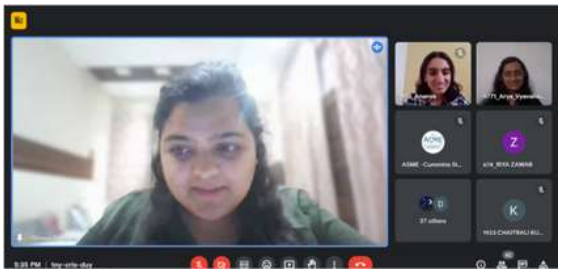
The second day of the ASME Cummins Student Section's Internship Talk 4.0 program comprised of the following speakers:

Ms. Vyavahare recounted her experience working at Mercedes-Benz's R&D department. She shared insights into the department's work, useful information in her profession, and advice on applying to other firms. She also highlighted the value of foundational skills.



Ms. Arya giving insights on R&D sector

Shreya Bahalkar (JCB) spoke about her internship and present work as a Project Manager at JCB. She guided the students, answered their questions, and gave an overview of several divisions in the business sector. Shivani Pandit (Purdue University) focuses on higher education possibilities. She explained the university application procedure, Cummins College scholarships for Master's degrees, and the GRE, TOEFL, and CGPA requirements for Purdue University admission. Following the lectures, there was an interactive Q&A session where students could clarify any questions they had.



Ms. Shreya sharing her experience at JCB

Overall, the students who attended the workshop found it to be very informative. They gained valuable insights into how to approach companies and applications, essential skills required for success in the industry and, opportunities for higher education and scholarships. The ASME Cummins Student Section provided a valuable platform for students to learn and prepare for their future careers. This experience will undoubtedly benefit them in their future endeavours.

-Chaitrali Kulkarni (T.Y. Mechanical)

REVERSE ENGINEERING

ASME had organised an event Reverse Engineering on 8th February 2024. The event was held on college premises. It had an empty crossword template which was to be filled within a given time limit. Honestly, it had been years since I had solved any crossword hence this event enriched my memories while solving crosswords. Each person was allotted a topic through chits. We were supposed to fill the crossword with words only relevant to the given topic. The topics chosen for the event were:

1. **Space**
2. **Automobiles**
3. **Sustainability**
4. **Machines**
5. **Industry**

The topics were fascinating and relevant to all of the participants regardless of their respective engineering fields. The activity was also scheduled to be during college hours with an option to choose our own time slot for participation. This made it really convenient for me to participate in the event. It provided me with the opportunity to showcase my vocabulary skills and enjoy the joy of literature while also testing my knowledge of the respective industry that was allotted to me. Events like these help us to think out of the box (however, within the box would certainly be more appropriate for this event!). I would like to express gratitude towards the ASME Cummins Student Section for arranging such a wonderful event.

- Gayatri Kulkarni (S.Y. Mechanical)

Students completing their crosswords

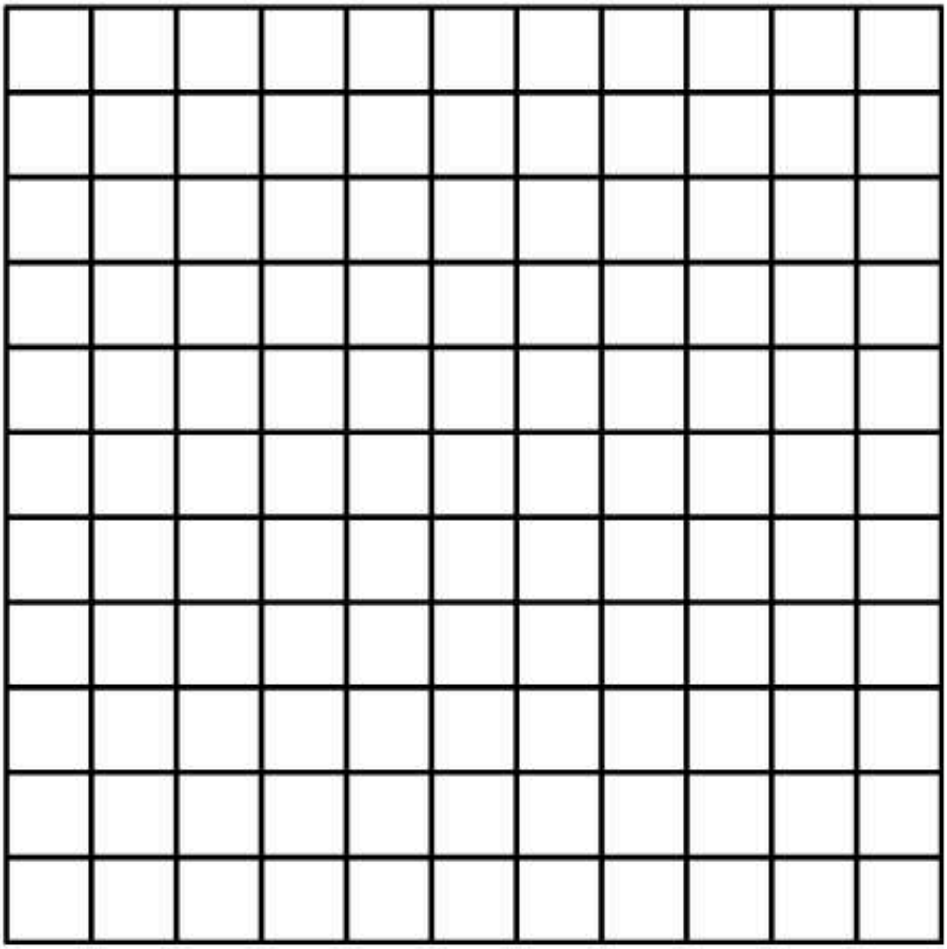
TRY IT YOURSELF!

MKSSS's Cummins College of Engineering for Women, Pune

ASME Cummins Student Section

Reverse Engineering

TOPIC :



Name :

U.No. :

Branch and Year :

E-mail ID :

Contact Number :

INDUSTRIAL VISIT

CCOEW's ASME Student Branch organised an industrial visit to Lear Corporation's Chakan Plant on March 29, 2024. Renowned globally as the only seating supplier with in-house electronic and software capabilities and operating across 39 countries, Lear supplies top automakers worldwide including Škoda, Suzuki, Hyundai and Mahindra. The main headquarters are located in Southfield, Michigan.

The Chakan Plant primarily focuses on foam manufacturing, seat mechanisms and assembly, while another facility in Bhosari concentrates on research, development, and testing.

Students from the first to the final year, along with Prof. Yashwant Munde and Prof. Avinash Shinde from the Mechanical Department, took part in the visit.

Lear Corporation plant at Chakan

Departing from the college at noon, we arrived at the plant by 1:30 pm. Shortly after our arrival, we received a presentation from company representatives, providing an overview of the plant, the company, and its operations. This was followed by a brief Q&A session, allowing students to delve into industry concepts like Just-in-Time (JIT), Free Cash Flow and IATF standards.

We also received insights into the plant's sustainability initiatives, which include a well-balanced global footprint and a commitment to increasing renewable energy usage. The company is exploring the use of eco-friendly foam materials and is adopting recyclable packaging. Lear aligns its product capabilities with industry mega-trends such as autonomy, connectivity, and electrification. They have a proven track record of delivering quality seating systems to customers and have pioneered Just-in-Time (JIT) seating assembly. Their use of environmentally sustainable foam, natural fibres, responsible leather, and recycled ocean plastic are all part of their resources and materials supply chain.

INDUSTRIAL VISIT

Following the safety briefing, we toured the shop floor, where we observed several assembly lines dedicated to seat manufacturing, gaining an understanding of seat track and recliner production. Unfortunately, safety constraints prevented us from visiting the foam manufacturing unit due to the hazardous chemicals involved. Post-tour, we were provided snacks and a brief break before attending an address by the plant head.

Another Q&A session ensued, addressing lingering tour queries. ASME CCOEW expressed gratitude by gifting a sapling to the company, symbolizing appreciation for the educational opportunity provided. Finally, we departed and returned to the college by evening. It was a great learning experience for all the students.

-Aditi Sant (T.Y. Mechanical)

ASME CCOEW executive committee

Group photo with the Lear Corporation employees

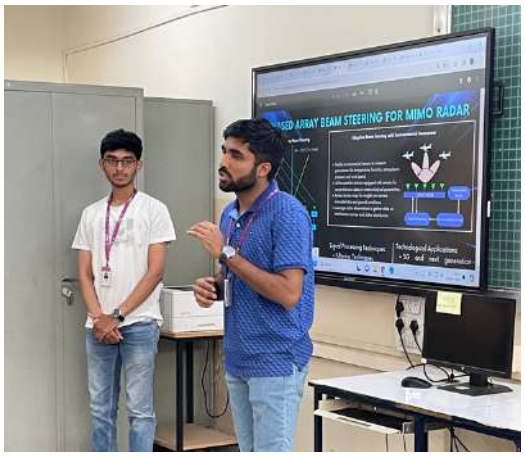
ENGINEER'S CANVAS

Engineer's Canvas was an event organised by the ASME CCOEW student section in collaboration with the IT Department of the college. It was a part of the college's technical fest 'Innovation 2024'. The abstract submission and poster presentation competition attracted a total of 27 registrations, which highlighted a significant interest in innovative research and projects.

A total of 27 team registrations were received with around 5 team registrations from external colleges. Out of the 27 teams, 7 were individual participations. The 27 teams were a part of the first round from which the top 24 teams were shortlisted based on their abstracts and appeared for the poster-making and the presentation round on the event day.

Judging of the posters

The event coordinators were Maithili Deshpande (Chairperson, ASME-CCOEW) and Ketaki Deshwandikar, who led the planning and execution of the event. Assisting them were a team of 8 volunteers, with Siddhi Jadhav and Janhavi Mishra, who also served as panel members. The remaining volunteers—Devyani, Sejal Patil and Pallavi along with ASME CCOEW volunteers Surabhi S Sangale, Aboli Pakhale (Vice-Chairperson), Ananya Bhusare, Vedika Nalla and Gayatri Kulkarni—contributed to various aspects of the event to provide support and coordination.



Competitors explaining their projects

The competition served as a platform for participants to showcase their creativity, research skills, and innovative thinking. Through the submission of abstracts and poster presentations,

ENGINEER'S CANVAS

participants contributed to the advancement of knowledge and the exploration of novel ideas across diverse fields. The competition fostered collaboration, creativity, and critical thinking among participants, enriching the academic and intellectual landscape. The Winning Teams were:

1st : ByteByByte
College Name: MKSSS's Cummins College of Engineering for Women Pune. (Sonakshi Goyal and Ruchika Suryawanshi)

2nd : Scaleup
College Name: Nehru Institute of Technology, Kaliyapuram, Tamil Nadu. (Akash Subramani)

3rd: Hack O' Holics -
College Name: MKSSS's Cummins College of Engineering for Women Pune. (Gargee Dorle and Isha Purnapatre)

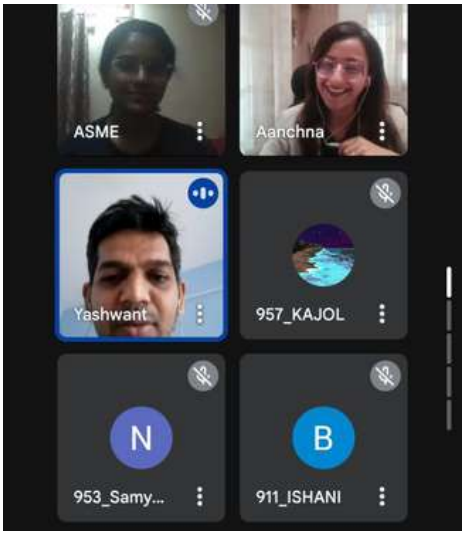
Engineer's Canvas, a collaborative effort between MKSSS's CCOEW Campus, Cummins College Student Panel, and ASME CCOEW, culminated in a dynamic showcase of innovative solutions from 24 top teams. With a prize pool of Rs 10,000, the event fostered creativity and technical excellence among participating students, underscoring the importance of collaborative learning and real-world problem-solving in engineering education.

- Surabhi Sangale (T.Y. Mechanical)

Photo of the organising team with the judges

AI/ML IN MECHANICAL ENGINEERING

A session regarding the use of AI/ML in Mechanical Engineering was held on April 6, 2024. It was an exceptional opportunity for students to delve into the transformative applications of artificial intelligence and machine learning in our field. The speaker for the day was Dr Aanchna Sharma. She is a Senior Engineer at General Motors. Her area of expertise is Material Methods and Analysis. Completing her bachelor's and master's degrees from Lovely Professional University; and her postdoctorate from IIT Jammu, she is a distinguished speaker with a commendable academic background. She adeptly guided over 40 participants through the intricacies of this cutting-edge technology.



Interaction of students, faculty and Guest speaker

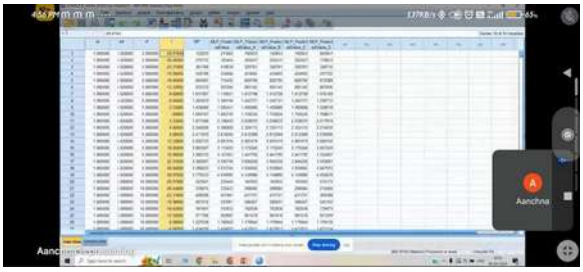
Dr Sharma gave a comprehensive presentation, enriched by her academic journey from LPU to IIT Jammu. She provided relevant and valuable insights into the current landscape and prospects of AI/ML in Mechanical engineering. From the foundational concepts to various contemporary advancements, her session catered for students across all academic levels, fostering a conducive environment for learning and engagement.

The speaker first introduced the audience to the concept of Industry 4.0. When related to Artificial Intelligence and Machine Learning, it includes concepts like Predictive Maintenance, Quality Control and Defect Detection, Process Optimisation, Data-driven Decision Making etc.

Speaker explaining Industry 4.0

AI/ML IN MECHANICAL ENGINEERING

She then elaborated on the types of learning models typically used: Supervised, unsupervised, and reinforcement learning. The speaker then went through the key steps to follow for predictive modelling. She then elaborated on the advantages and limitations of using these models and provided their applications.



Demonstration of a real-life problem

The session delivered knowledge in an informative yet clear way and was easy to follow. The session ended with a short Q&A where we were encouraged to ask questions. The speaker made sure we were all part of this conversation which kept the session interactive.

Lastly, we were given a demonstration of how a real-life problem was solved using a data-driven model via one of the speaker's previous projects. Overall it was a fantastic experience, we felt inspired and ready to explore more about Artificial Intelligence and Machine Learning.

- Sakshi Zimur (S.Y. Mechanical)

"AI catalyzes industry evolution, spotlighting the value of adaptable skills amidst automation."

ASME WEBSITE LAUNCH 2.0

ASME-CCOEW arranged a website launch event in collaboration with the Mozilla Club of CCOEW on April 12, 2024. The Mozilla Club members showcased the updates that they had made to the website from the feedback that they had received from the ASME Student Section. Both the teams further discussed the additional ways in which the website could be improved. One of the major focal points going forward will be making the website mobile-friendly. ASME-CCOEW is incredibly grateful to the Mozilla Campus Club for providing the section with an amazing website. Both teams hope that this collaboration will foster more friendly relations between the college clubs in the future. Following are the views of the upcoming head of the Mozilla Campus Club.

Mozilla Campus Club was established in 2014, with the aim of spreading awareness about open source. The club regularly hosts events, workshops and guest talks about GitHub, and Google Summer of Code and also hosts its own Hacktoberfest repository which enables students to explore open source and make contributions to it.

The major improvements introduced by phase 2 of the ASME X Mozilla collaboration were the change in the colour theme to a fresh, light-themed experience that promised user-friendly navigation of the website, followed by the inclusion of a new team of ASME, and the reports of the recent events conducted by ASME on the website. A major highlight was the introduction of a contact page wherein ASME can be directly contacted through the website, this was done using an API.

A repository was hosted by Mozilla Campus Club on GitHub for making further improvements in the website to make it more optimized. All students of Cummins College were given the opportunity to contribute to the website and step into the world of open source. It was presented as an opportunity to learn and contribute to a real project. The changes are being reflected in the final website. Optimal time was given to the participants to complete their contributions.

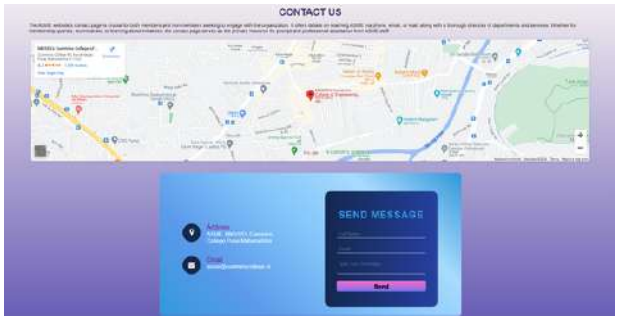
All contributors were appreciated with certificates, of which the top contributors were appreciated with a special shoutout via email.

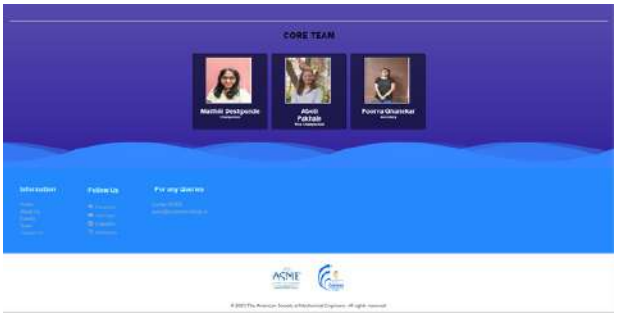
ASME WEBSITE LAUNCH 2.0

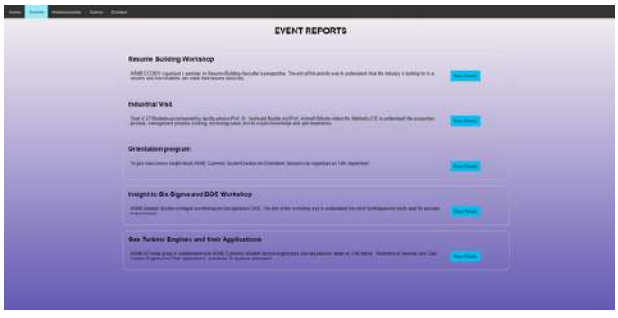
Interested Students were assigned issues by the members of Mozilla's Tech team which included the tech team lead Manasi Deshmukh and ASME website collaboration coordinator Ananya Kale, alongside Vaibhavi Deshmukh, the new tech team head of Mozilla. The contributions were meticulously monitored and successful and Pull Requests were merged. The website collaboration event was conducted smoothly with transparency and coordination among members of Mozilla, ASME and contributors of the website. It was an opportunity to work on a real-life project and was worth every effort put into it. The event was a huge success with several participants eager to contribute.

- Tanushree Kadus

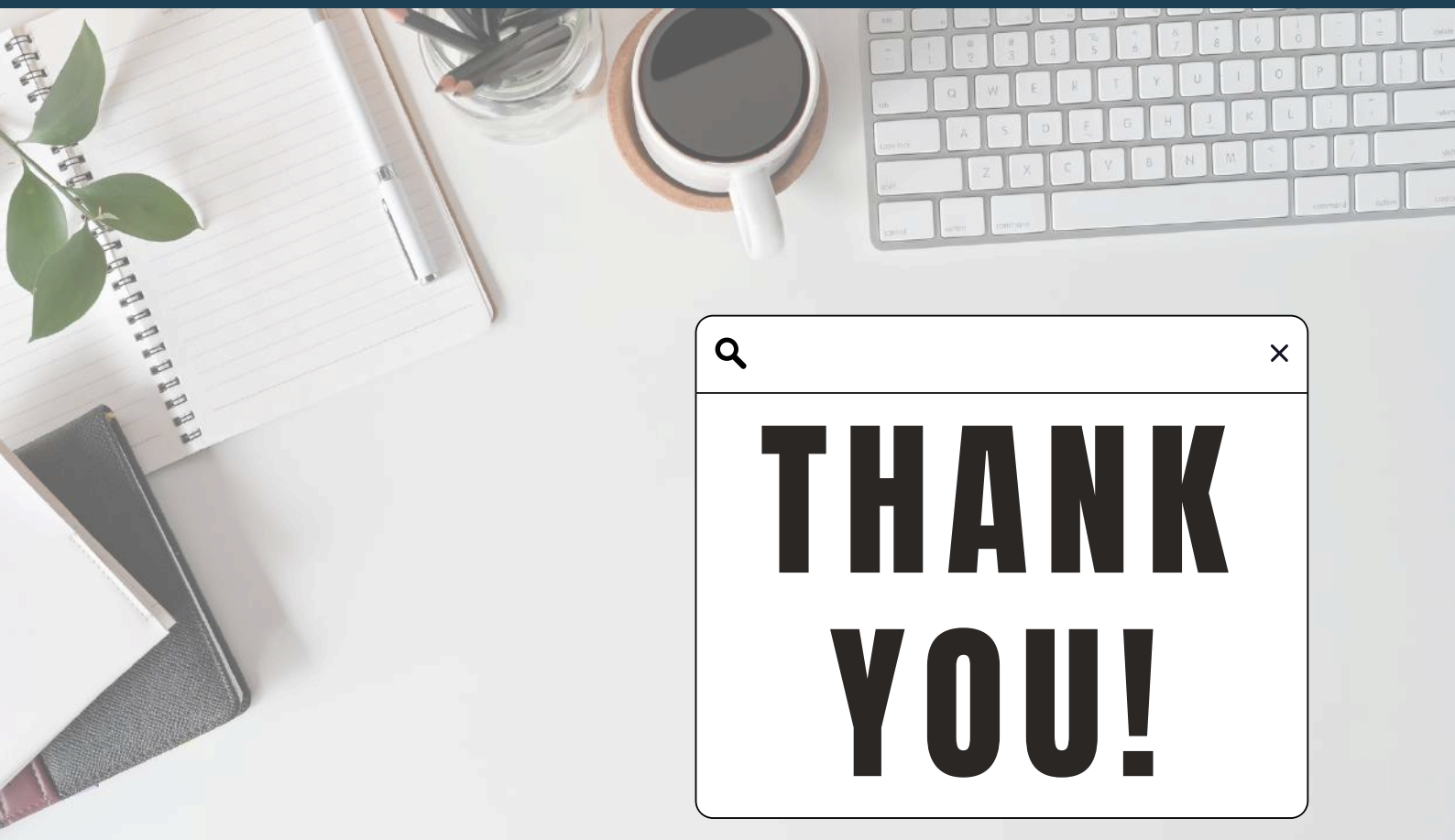
(Head Co-ordinator, Mozilla Club)







Snapshots from the website



THANK YOU!

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https://mozilla-campus-club-cummins.github.io/ASME-Website/